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ABSTRACT

The report presents data on the demographic, social, and economic characteristics of the approximately 2.5 million persons 14 years old and over who did hired farmwork during 1981. Data from a survey conducted by the Bureau of the Census included each state and the District of Columbia but not Puerto Rico or other United States territories. In 1981, most farmworkers were under 25 (55%), white (73%), and male (77%). Hispanics comprised 13% of the workers; blacks and others, 14%. Workers averaged 98 days of farmwork; earned an average $4,299 annually, of which $2,659 resulted from farmwork; and had a median education of 11 years (7.1 years for Hispanics, 9.6 years for blacks, 11.7 years for whites). Demographic data indicated that at survey time, most farmworkers were in the South (40%) and the North-Central Region (28%). Migrant laborers, 75% of whom were white, accounted for 5% of hired farmworkers, a decline from recent years. Since 1971, the number of farmworkers between ages 18 and 44 increased, the number between ages 14 and 17 decreased, and the number of days spent at farm work increased. Statistical tables present racial/ethnic characteristics, farmwork duration, demographic and employment characteristics, and farm and nonfarm earnings. (SB)

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United States Department of Agriculture

Economic Research Service

Agricultural Economic Report Number 507

The Hired Farm Working Force of 1981

Susan L. Pollack

William R. Jackson Jr.

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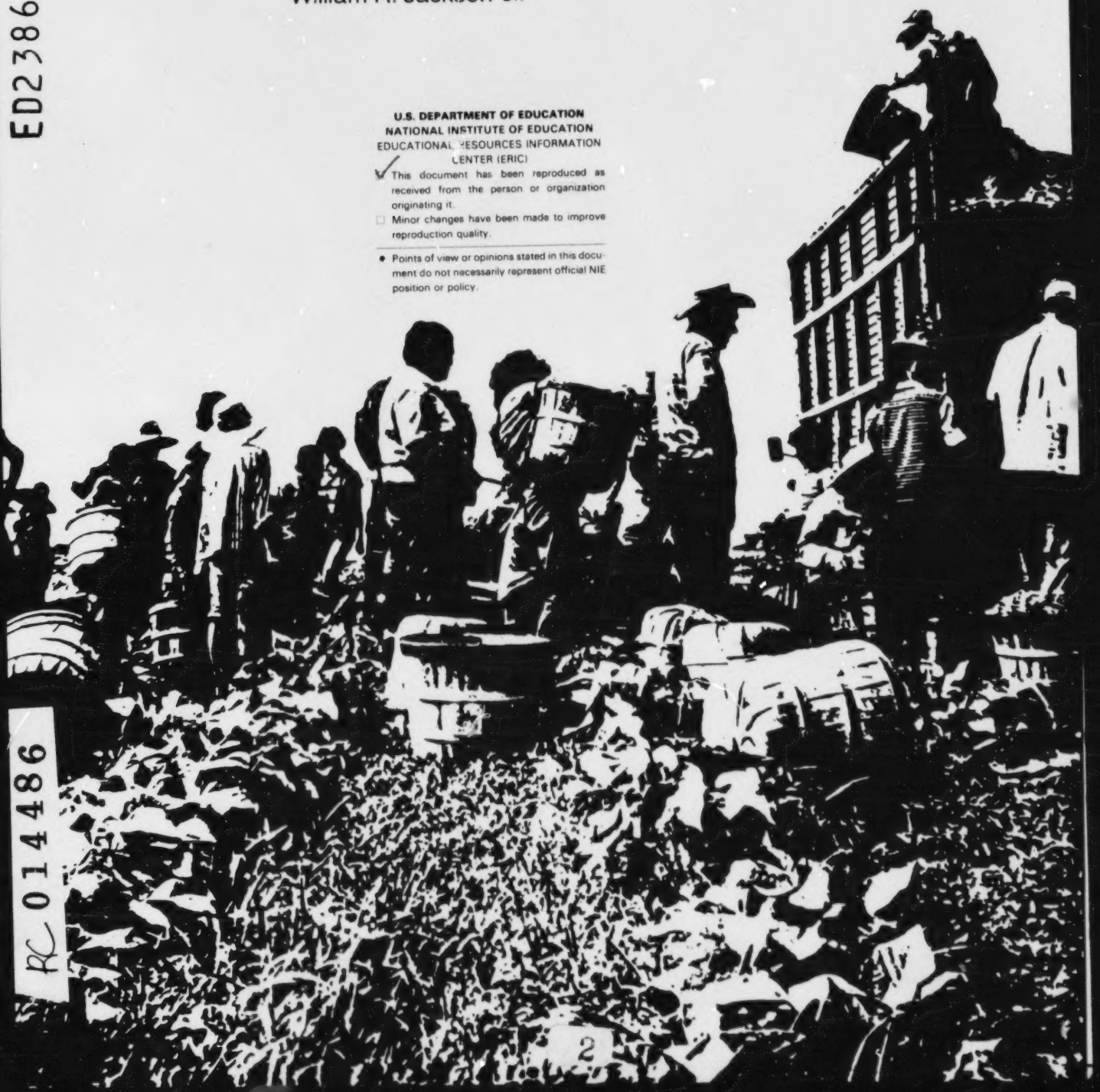

RC 014486

THE HIRED FARM WORKING FORCE OF 1981, by Susan L. Pollack and William R. Jackson Jr., Economic Development Division, Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 507 .

ABSTRACT

In 1981, approximately 2.5 million people 14 years of age and over did farmwork for cash wages and salary. The racial/ethnic composition of the work force was 73 percent white, 13 percent Hispanic, and 14 percent black and other. Fifty-five percent of the farmworkers were under 25 years old and 77 percent were male. At the time of the survey, more farmworkers resided in the South (40 percent) and North Central (28 percent) regions than in the Northeast and West. About four of five workers had nonfarm residences. The average annual earnings in 1981 were $4,299, of which $2,659 came from an average of 98 days of farmwork. Migrant workers accounted for only about 5 percent of all hired farmworkers.

Keywords: Hired farmworker, age, sex, racial/ethnic group, migrant, earnings, employment, education, Census Region, Standard Federal Region.

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HIGHLIGHTS

In 1981, approximately 2.5 million persons 14 years of age and over did hired farmwork, according to the recent Hired Farm Working Force Survey. Most of the workers were less than 25 years old (55 percent), white (73 percent), and male (77 percent). Hispanics made up 13 percent of the work force and blacks and others made up 14 percent. The median level of education for hired farmworkers was 11 years. Eighty-four percent lived at nonfarm residences.

All workers averaged 98 days of farmwork. Nearly three-quarters of farmworkers worked fewer than 150 days at farmwork. Regular and year-round workers made up only one-quarter of the work force but accounted for 73 percent of total days worked.

In 1981, hired farmworkers earned an average of $4,299 from both farmwork and nonfarmwork. Only $2,659 of this average was earned from farmwork.

Forty percent of the farmworkers were in the South at the time of the December 1981 survey. Twenty-eight percent of the workers were in the North-Central Region, followed by 24 percent in the West. Only 8 percent of the farmworkers were in the Northeast.

Only about 5 percent of the hired farmworkers (115,000) were migrant laborers in 1981, a decline from the percentage in recent years. Seventy-five percent of the migrants were white, 17 percent were Hispanic, and 8 percent were black and other. Over half of all migrants (53 percent) worked fewer than 75 days at farmwork. Migrants earned an annual average of $3,995, and farmwork accounted for $2,728 of that amount.

Half of the farmworkers were not in the labor force for most of the year. Those who were primarily hired farmworkers made up 28 percent of the hired farm working force. Those who were primarily nonfarmworkers made up 17 percent and had the highest average annual earnings ($8,341) in 1981. Hispanics earned twice as much from farmwork ($4,319) as did blacks and others ($2,668) and whites ($2,359).

Over the past 10 years, the number of farmworkers between the ages of 18 and 44 increased, and the number of younger workers 14 through 17 decreased. The number of days spent at farmwork increased from an average of 198 million worker-days in 1969-71 to 257 million in 1979-81.

The Hired Farm Working Force of 1981

Susan L. Pollack
William R. Jackson Jr.

INTRODUCTION

About 2.5 million hired farmworkers earned cash wages or salary in 1981. According to the 1981 Hired Farm Working Force Survey, this was not significantly different from estimates in any year since 1968, when there were 2.9 million workers. Before 1968, there had been a long-term downward trend (table 1).

Through the 1960's, the migrant work force experienced a steady decline (table 2). Factors contributing to the decreased use of migrant labor included adoption of new technologies, changes in farm size, and new farm and farmworker programs. Since 1970, the number of migrant workers stabilized at around 200,000 and remained at that level until 1981. However, in 1981 the number of migrant farmworkers decreased by 47 percent to 115,000 from 217,000 only two years before.

Reasons for the decline in the number of migrants from 1979 to 1981 are not clear. One possible explanation is that the demand for migrant labor in agriculture has declined because of changing production levels and agricultural practices. However, an examination of various production data, including acres planted, acres harvested, value of production, and hours of labor required for various commodities in different regions did not provide conclusive evidence to support decreased labor demand. Also, information gathered from farm labor researchers in several States where migrants worked, as well as administrative data from Federal agencies servicing migrant farmworkers, did not generally support the idea of a diminishing need for migrant workers.

Another explanation for the decrease may be that farm operators are increasingly substituting illegal aliens for domestic farmworkers. The Hired Farm Working Force Survey probably enumerates few illegal workers, either because they have returned home before the time of the survey or because they avoid survey enumerators due to their illegal status. Therefore, an increased substitution of illegal workers for domestic laborers would appear as a decrease in the number of migrant workers in the survey data. Data on the number of illegal workers in agriculture are not available to allow a further examination of this premise.

Table 1--Hired farmworkers, by duration of farmwork, 1950-81

Year	Total	Days of hired farmwork during the year 1/				
		Fewer than 25	25 to 74	75 to 149	150 to 249	250 or more
		Thousands				
1950	4,342	--	--	--	--	--
1951	3,274	1,118	925	379	301	551
1952	2,980	1,008	928	324	296	424
1953 2/						
1954	3,009	1,101	756	318	364	470
1955 2/						
1956	3,575	1,497	920	410	305	443
1957	3,962	1,762	1,044	501	256	399
1958	4,212	1,893	--	--	--	--
1959	3,577	1,412	863	502	348	452
1960	3,693	1,531	868	465	390	438
1961	3,488	1,600	849	354	281	404
1962	3,622	1,555	933	408	284	442
1963	3,597	1,735	771	392	309	390
1964	3,370	1,369	924	413	326	338
1965	3,128	1,264	807	397	282	379
1966	2,763	1,130	717	339	211	367
1967	3,078	1,338	738	327	277	397
1968	2,919	1,299	731	308	256	324
1969	2,571	1,106	718	258	189	301
1970	2,488	1,093	623	293	172	306
1971	2,550	1,191	648	213	213	285
1972	2,809	1,130	663	361	288	367
1973	2,671	1,085	567	351	247	421
1974	2,737	1,169	619	308	274	367
1975	2,638	1,180	556	319	228	355
1976	2,767	1,145	652	347	290	333
1977	2,730	1,056	667	322	295	391
1978 2/						
1979	2,652	898	672	323	335	423
1980 2/						
1981	2,492	969	538	310	281	394

-- = not available.

1/ Data are rounded to nearest thousand and may not add to total.

2/ No survey conducted.

Table 2--Migrant farmworkers, by duration of farmwork, 1960-81

Year	Total	Days of farmwork during the year 1/			
		Fewer than 25	25 to 74	75 to 149	150 and over
		Thousands			
1960	409	92	122	84	111
1961	395	99	131	80	85
1962	380	92	133	83	73
1963	386	108	89	111	78
1964	386	114	102	88	82
1965	466	165	114	92	94
1966	351	76	114	73	87
1967	276	81	81	56	57
1968	279	103	85	39	52
1969	257	85	84	46	41
1970	196	61	59	31	45
1971	172	55	57	35	24
1972	184	46	55	35	48
1973	203	57	57	37	52
1974	209	68	63	35	43
1975	188	45	74	21	48
1976	213	66	60	53	34
1977	191	39	73	35	44
1978 2/					
1979	217	56	80	33	48
1980 2/					
1981	115	24	37	12	43

1/ Data are rounded to nearest thousand and may not add to total.
2/ No survey conducted.

Finally, because the migrant data are derived from a survey, there is the possibility of an estimation error or an increased nonsampling error associated with survey procedures (see appendix II). Additional evidence from the 1983 Hired Farm Working Force Survey is required to evaluate more closely the observed decrease in numbers of migrant farmworkers.

This report presents data on the demographic, social, and economic characteristics of persons 14 years of age and over who

did hired farmwork for at least 1 day during 1981.[1] The report focuses on the characteristics of racial/ethnic, regional, and migratory groups of farmworkers. It also summarizes some of the more important changes and trends over the past decade in the size, composition, and employment patterns of hired farmworkers.

Data in this report are from the Hired Farm Working Force Household Survey conducted for the USDA's Economic Research Service by the Bureau of the Census, U.S. Department of Commerce.[2] The survey sample of households includes each State and the District of Columbia, but excludes Puerto Rico and other U.S. territories and possessions. In 1981, approximately 58,000 households were interviewed; 1,555 contained persons who did hired farmwork in 1981. Information obtained from this sample of households was expanded to provide estimates of the total hired farm working force population.

The 1981 hired farm working force estimates are based on weights from the 1980 Census of Population. Estimates for 1972 to 1979 were based on weights from the 1970 Census of Population. The switchover from 1970 census weights to 1980 weights produced an "artifical bump" (slightly higher estimates) in the data series; however, the differences in the 1981 estimates based on 1970 and 1980 weights are not significant. For example, using the 1970 census weights, the 1981 total hired farmwork and migrant population estimates are 2,423,000 and 112,000, respectively. The estimates based on the 1980 census weights are 2,492,000 hired farmworkers and 115,000 migrants. Additional comparisons are presented in appendix table 17.

The Current Population Survey (CPS) is a probability sample survey, and standard errors can be derived for the estimates. Statements of comparison appearing in the text but not necessarily in the tables or figures are based on data significant at the 95-percent confidence level (two standard errors) or higher unless otherwise indicated. Additional information on the source and reliability of the survey estimates is provided in the appendix.

HIRED FARMWORKER TRAITS IN 1981

In 1981, most hired farmworkers were white, resided in the South and North Central Regions, and did not live on farms. Hired farmworker characteristics were as follows:

--73 percent were white, 13 percent were Hispanic, and 14 percent were black and other.

---

[1] Data for earlier years are available in The Hired Farm Working Force of 1979, AER-473, Econ. Res. Serv., U.S. Dept. Agr., Aug. 1981, and previous issues.

[2] Since 1977, the Hired Farm Working Force Survey has been conducted biennially in December as a supplement to the Current Population Survey.

--40 percent who were 25 years of age and over did not continue schooling past the eighth grade.

--5 percent were migrants.

--The median age was 23.9 years.

--84 percent did not live on farms at the time of the survey.

--40 percent resided in the South, and 28 percent resided in the North-Central Region.

Age and Sex

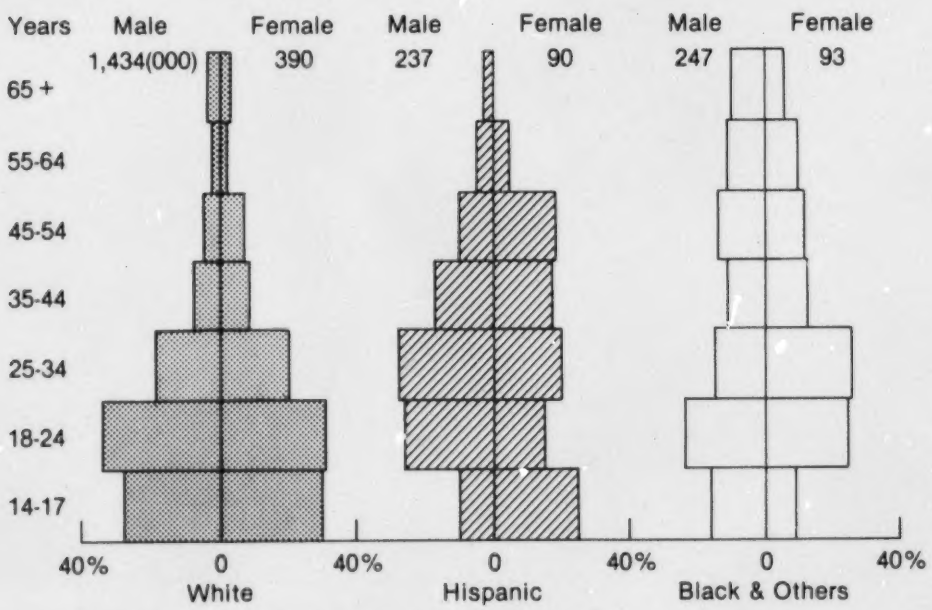
Fifty-five percent of all hired farmworkers were under the age of 25, and 77 percent were male. Twenty percent of the workers were 35 to 64 years old, and another 20 percent were between 25 and 34 years old.

White farmworkers were generally younger than minority workers. The median age for whites was 22.6 years, compared with 31.7 years for blacks and others and 29.9 years for Hispanics. Sixty-one percent of all whites were under 25 years old (fig. 1). Most minority farmworkers, on the other hand, were 25 years old and over. Male and female workers were about the same age within each racial/ethnic group. The large proportion of minority farmworkers in the higher age groups suggests these

Figure 1

Hired Farmworkers, 1981

By Age, Sex, and Racial/Ethnic Group



See Appendix III for definitions of racial/ethnic categories.

workers have a strong attachment to farmwork. By contrast, most whites appear to use farmwork as a starting job or for supplemental income, and find nonfarm alternatives later.

Household Status and Family Size

Farmworkers of all racial/ethnic groups were more likely to be household members than heads of households. However, heads of households were more likely to be employed for more days during the year than were other members of a household. Heads of households made up 67 percent of all farmworkers employed for 150 days or more during the year. This proportion was approximately the same for whites, Hispanics, and blacks and others. Only one third of the workers who worked fewer than 150 days were household heads.

The common perception that farmworkers are members of large families is not supported by the 1981 data.[3] Almost half of the farmworkers' families had three or fewer immediate members (table 3). Minority farmworkers' families were more likely to be larger than were white families; 29 percent of the Hispanic farmworkers and 28 percent of blacks and others came from families with at least six people. Only 13 percent of whites came from families of this size.

Families headed by a farmworker were smaller than those headed by a nonfarmworker. Sixty-one percent of the families headed by a farmworker had three or fewer members, compared with only 30 percent of the families headed by a nonfarmworker.

Large farmworker families had higher income levels more often than did small families. Of the farmworker families with incomes of at least $15,000, 42 percent had five or more members, compared with 3 percent with one member and 11 percent with two members. Larger families had higher incomes, probably due to higher paying nonfarm jobs of family heads supplemented by income from other family members doing farmwork. Thus, these families were less dependent on farm earnings for their major source of income. Conversely, smaller families had lower incomes, probably because of greater dependence on farm earnings for their major source of income.

Education

In 1981, hired farmworkers had a median education of 11 years. Forty percent of the workers had completed at least high school, compared with 29 percent who had completed less than 9 years (table 4). The large number of students doing farmwork during their school breaks contributed to the proportion of workers completing 9 or more years of school. About half of the students had completed from 9 to 11 years of school.

The education levels, however, varied by racial/ethnic groups. Hispanic farmworkers had the lowest education level with a median of 7.1 years, while blacks and others had a median of 9.6 years. White farmworkers, on the other hand, had a median

[3] Families are defined to include only those members of a household who are related to the head of household.

Table 3--Farmworker families, by selected characteristics and size of family, 1981

Selected characteristics	Farmworker families 1/	Percentage distribution of families, by number of people in family					
		1	2	3	4	5	6 or more
	Thousands	Percent					
Headed by farmworkers	1,018	22	22	17	18	10	11
Headed by nonfarmworkers	1,020	4	8	18	26	23	21
Racial/ethnic groups:							
White	1,624	13	15	19	24	16	13
Black and other	234	23	17	12	8	12	28
Hispanic	181	5	14	14	17	21	29
Migratory status:							
Migrants	92	18	10	12	17	24	18
Nonmigrants	1,947	13	15	18	22	16	16
Family income:							
Less than $5,000	326	35	18	18	13	7	9
$5,000 - 7,499	215	24	13	18	16	10	18
$7,500 - 9,999	199	15	18	23	18	16	10
$10,000 - 14,999	366	11	19	16	23	15	17
$15,000 - 24,999	481	6	14	15	24	22	19
$25,000 and over	374	0	7	18	31	23	20
Families for which income data are not available	77	9	18	25	25	12	13
All farmworker families 2/	2,039	13	15	18	22	16	16

1/ Includes only those members related to the head of household.
2/ Numbers and percentages may not add to totals due to rounding.

of 11.7 years of schooling. Only 14 percent of Hispanics and 25 percent of blacks and others completed 12 years or more of schooling.

Forty-five percent of the farmworkers 25 years of age and over were high school graduates. However, about the same amount (40 percent) had completed less than ninth grade.

Table 4--Years of school completed by hired farmworkers, by racial/ethnic groups, 1981 1/

Education	Unit	Whites	Hispanics	Blacks and others	Total
Number of workers	Thousands	1,824	328	340	2,492
Years of schooling completed:					
0 - 4	Percent	2	29	16	7
5 - 8	do.	18	41	29	22
9 - 11	do.	34	16	30	31
12	do.	29	10	19	26
13 or more	do.	17	4	6	14
Total	do.	100	100	100	100
Median	Years	11.7	7.1	9.6	11.0
Number of workers 25 years and older	Thousands	709	206	212	1,126
Years of schooling completed:					
0 - 4	Percent	4	37	25	14
5 - 8	do.	19	44	34	26
9 - 11	do.	16	6	19	15
12	do.	37	9	13	27
13 or more	do.	24	4	9	18
Total	do.	100	100	100	100
Median	Years	12.3	6.2	7.9	11.0

1/ Numbers and percentages may not add to totals due to rounding.

EMPLOYMENT AND EARNINGS

The average annual earnings of farmworkers in 1981 for both farmwork and nonfarmwork was $4,299. Farmwork earnings are among the lowest of all occupations in the United States, although there are significant differences among farmworker groups. In 1981, the average annual earnings for all U.S. nonagricultural private sector production workers was $13,270, more than three times the earnings of farmworkers.[4]

[4] Based on average weekly earnings, Employment and Earnings, U.S. Dept. Labor, Bureau of Labor Statistics, January 1983.

Hispanic farmworkers earned $5,340, the highest annual farm and nonfarm earnings of all racial/ethnic groups, followed by whites who earned $4,288, and blacks and others who earned $3,358. While farmwork accounted for about 80 percent of the earnings of Hispanic and black and other farmworkers, it accounted for only about one-half the earnings of whites. Farmworker earnings of Hispanics were $4,319, almost twice the farmwork earnings of blacks and others, $2,668, and whites, $2,359. Males earned almost twice as much as females from farmwork and nonfarmwork, $4,829 versus $2,526; heads of households earned more than 2.5 times as much as other household members, $6,876 versus $2,434.

Days Worked

Farmworkers worked an average of 98 days at farmwork in 1981. Those who did only hired farmwork averaged about 129 days, and those who did both farmwork and nonfarmwork averaged 53 days of farmwork and 125 days of nonfarmwork. Earnings by days worked were as follows:

--Casual workers, who worked fewer than 25 days at farmwork, made up 39 percent of the farm work force and earned $2,756 annually, $[illegible]6 of which was from farmwork.

--Seasonal workers who worked 25 to 74 days at farmwork made up 22 percent of the work force and earned $2,799 annually, $1,126 of which was from farmwork. Those who worked 75 to 149 days, 12 percent of all farmworkers, earned $2,650 annually from farmwork and $1,431 from nonfarmwork, for total annual earnings of $4,081.

--Eleven percent of the farm work force worked 150 to 249 days at farmwork. These workers, classified as regular workers, earned $6,669 annually, of which $5,908 was from farmwork.

--Year-round workers, those working 250 days or more at farmwork, made up 16 percent of the hired farm work force. Their total average annual earnings were $8,632, with $8,461 from farmwork.

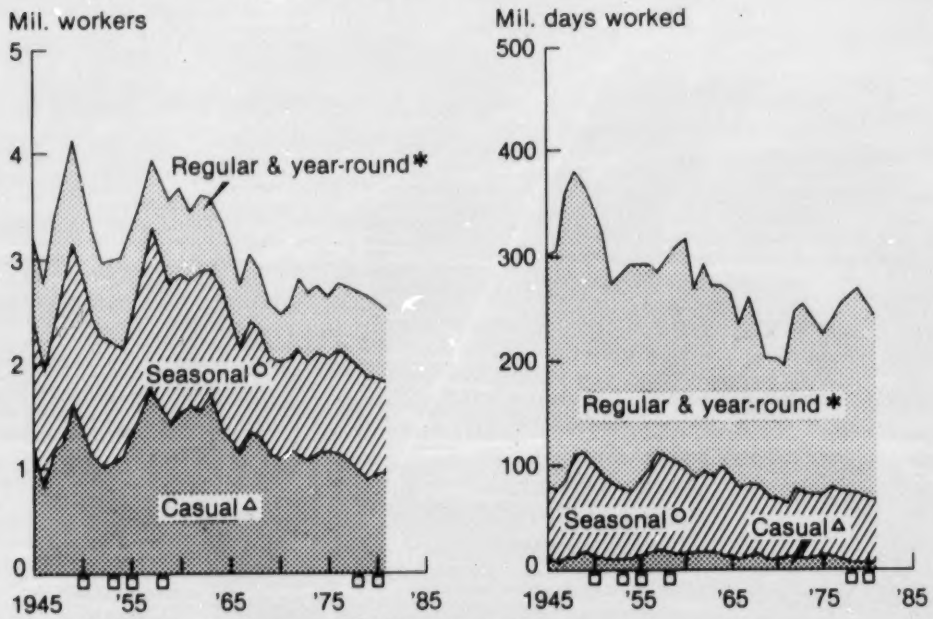
Casual and seasonal workers made up 73 percent of all workers but accounted for only 27 percent of the worker-days at hired farmwork (fig. 2).[5] Regular and year-round workers made up about 25 percent of the work force but accounted for almost 75 percent of the worker-days.

The number of days spent at farmwork varied by racial/ethnic group. White and black and other farmworkers spent fewer days

[5] A person completing at least 1 hour of farmwork during the day is credited with a worker-day of work.

Figure 2

Hired Farmworkers and Worker-Days



*Worked 150 or more days. ○Worked 25-149 days.
△Worked fewer than 25 days. □Interpolated (data not available).

in the year doing farmwork than Hispanics (fig. 3). Whites did farmwork for an average of 91 days in 1981; blacks and others averaged 104 days of farmwork; and Hispanics averaged 131 days. Forty-three percent of the whites and 35 percent of the blacks and others worked fewer than 25 days at farmwork, compared with 21 percent of the Hispanics (the differences in number of days worked between blacks and others and Hispanics are significant at the 90-percent confidence level). Additional differences regarding days of farmwork are:

--Female farmworkers were more likely than males to be casual workers. Over half (54 percent) of all female farmworkers did fewer than 25 days of farmwork, compared with 34 percent of the males. Conversely, only 9 percent of the females and 32 percent of the males worked 150 days or more.

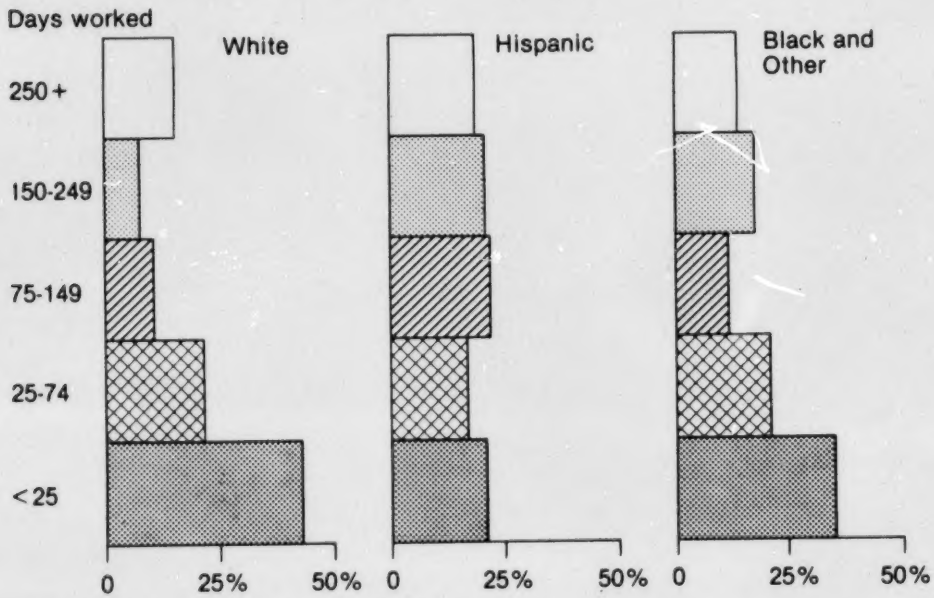
--Nonmigrants were twice as likely as migrants to be casual workers.

--Farmworkers in Standard Federal Region IX, the Lower Pacific Coast States, were more likely to be regular and year-round workers than workers in other regions. Forty-three percent of the workers in Region IX worked 150 days or more.

Figure 3

Hired Farmworkers, 1981

By Days of Farmwork and Racial/Ethnic Groups



See Appendix III for definitions of racial/ethnic categories.

Primary Employment Status

The hired farm working force is comprised mostly of people whose primary activity is not hired farmwork (table 5). Only 28 percent of the Hired Farm Working Force Survey respondents listed hired farmwork as their major activity, while nearly 50 percent of the workers were not in the labor force most of the year. The majority of this latter group were students who worked during school breaks.

The type of employment at which farmworkers spend most of their time affects their annual earnings. Hired farmworkers whose primary employment was in the nonfarm sector had the highest earnings. In 1981, they earned an annual average of $8,341, of which only $949 came from farmwork. Workers whose primary employment was hired farmwork earned an annual average of $7,258, with $6,981 from farmwork. Those workers who were only casual labor force participants, including students and housewives, had the lowest average annual earnings.

There were significant differences in the primary employment status among the racial/ethnic groups. Approximately 40 percent of white farmworkers were attending school, compared with 12 percent of the Hispanics and 24 percent of blacks and others (fig. 4). (The difference in the percentage attending school most of the year between blacks and others and Hispanics is significant at the 90-percent confidence level.) Minority

Table 5--Hired farmworkers: Average annual earnings by primary employment status, 1981 1/

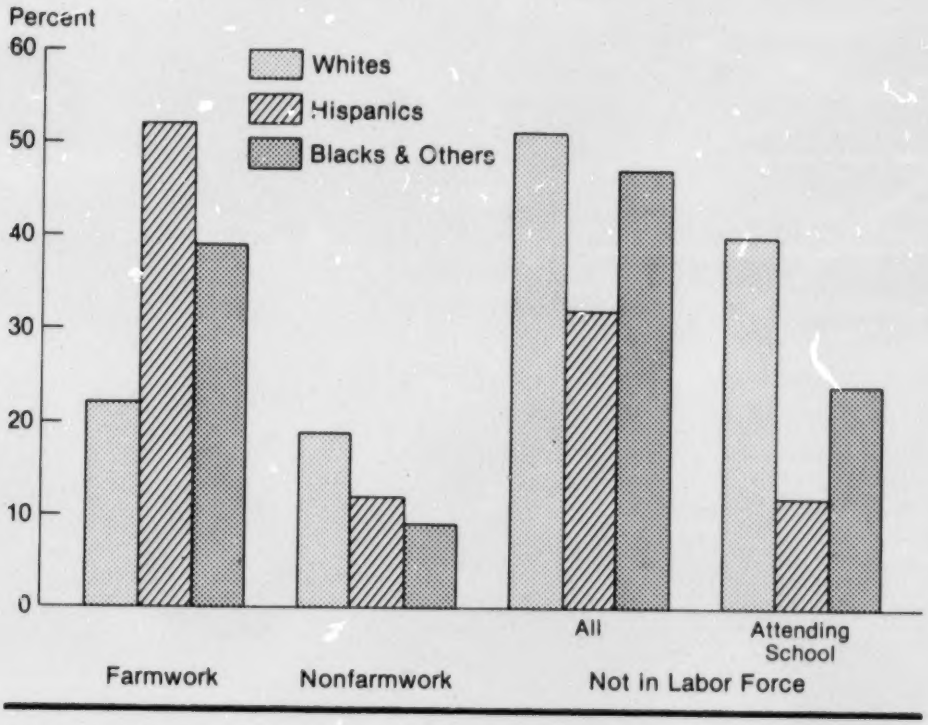
Primary employment status 2/	All farmworkers				Farmwork only		Both farmwork and nonfarmwork		
	Workers		Total annual earnings	Annual farm earnings	Workers	Annual farm earnings	Workers	Total annual earnings	Annual farm earnings
	Number	Distribution							
	Thousands	Percent	------- Dollars ------		Thousands	Dollars	Thousands	----- Dollars -----	
In labor force	1,303	52	6,962	4,290	712	6,347	591	7,695	1,802
Hired farmwork	706	28	7,258	6,981	601	7,172	105	7,749	5,882
Other farmwork 3/	90	4	2,494	1,725	70	1,825	20	4/	4/
Nonfarmwork	420	17	8,341	949	--	--	420	8,341	949
Unemployed	86	3	2,550	1,242	41	4/	46	4/	4/
Not in labor force	1,189	48	1,378	872	766	961	423	2,132	711
Keeping house	199	8	1,182	866	154	913	45	4/	4/
Attending school	858	34	1,307	809	516	894	342	1,932	682
Other	132	5	2,127	1,286	96	1,396	36	4/	4/
All hired farmworkers	2,492	100	4,299	2,659	1,478	3,557	1,014	5,381	1,350
Migrants	115	5	3,995	2,728	83	3,080	32	4/	4/

-- = not applicable.
1/ Numbers and percentages may not add to totals due to rounding.
2/ Refers to respondent's chief activity during the year. See appendix for definitions.
3/ Includes operating a farm and unpaid family labor.
4/ Averages not shown where base is fewer than 50,000 workers.

Figure 4

Hired Farmworkers, 1981

By Primary Employment Status and Racial/Ethnic Groups



farmworkers cited hired farmwork as their principal activity more often than whites. Just over half of the Hispanics and 39 percent of the blacks and others said that hired farmwork was their major activity, compared with only 22 percent of white farmworkers. The majority of Hispanic and black and other farmworkers (79 and 75 percent, respectively) said that hired farmwork was their only employment during the year. Only 53 percent of white farmworkers cited hired farmwork as their only employment.

REGIONAL DISTRIBUTION

The number and characteristics of hired farmworkers varied throughout the 10 Standard Federal Regions (SFR) (fig. 5). The demand for workers usually varied by type of crop and livestock activity, the length of the growing and harvesting seasons in the region, the extent of mechanization, and the scale of production. About 23 percent of all hired farmworkers were located in the Southeast (SFR IV) at the time of the December survey. The next largest concentration was in the North Central Lake States (SFR V) and the Southwest (SFR VI), where each had 15 percent of all workers. The Lower Pacific Coast (SFR IX) had 13 percent, and the Mid-United States (SFR VII) had 11 percent (table 6).

Figure 5

Standard Federal Regions

Racial/Ethnic Groups

The racial/ethnic composition of the hired farm working force also differed among the Standard Federal Regions. White farmworkers outnumbered minority farmworkers in all the Standard Federal Regions, except the Lower Pacific Coast, where the work force was made up of 49 percent Hispanic workers, 34 percent white, and 16 percent black and other. Hispanics also made up a larger percentage than blacks and others in the Southwest (SFR VI). Blacks and others, however, made up a significantly larger proportion of the farm work force than Hispanics in the Southeast (SFR IV), where 35 percent were blacks and others and 3 percent Hispanics. In the Mid-Atlantic Region (SFR III), 11 percent were blacks and others and less than 1 percent were Hispanics.

Crop and Livestock Activity

In 1981, 20 percent of all hired farmworkers were employed in grain production, more than the percentage for any other single commodity (table 7). Over 20 percent of the farmworkers were primarily involved in the production of vegetables and fruits and nuts, and another 20 percent worked in livestock and dairy activities.

Employment in crop and livestock activities varied by racial/ethnic group. Whites and blacks and others were more often employed in field crop production than were Hispanics. About 52 percent of white farmworkers and 58 percent of black and

Table 6--Number and distribution of hired farmworkers, by racial/ethnic groups and Standard Federal Regions, 1981 1/

Standard Federal Region	All hired farmworkers				
	Total		Distribution of racial/ethnic groups		
	Number	Portion	White	Hispanic	Black and other
	Thousands	Percent			
I-New England	60	2	100	2/	2/
II-New York and New Jersey	101	4	86	6	8
III-Mid-Atlantic	119	5	89	2/	11
IV-Southeast	567	23	61	3	35
V-North Central Lake States	380	15	99	1	2/
VI-Southwest	384	15	60	27	14
VII-Mid-United States	269	11	96	2	2
VIII-Mountain	107	4	92	5	4
IX-Lower Pacific Coast	334	13	34	49	16
X-Northwest Pacific Coast	172	7	86	13	1
United States	2,492	100	73	13	14

1/ Numbers and percentages may not add to totals due to rounding.
2/ Less than 0.5 percent.

other farmworkers worked in field crop production, compared with 31 percent of the Hispanic farmworkers. Hispanics, on the other hand, were primarily involved in the production of vegetables and fruits and nuts.

MIGRANTS

The number of migrant farmworkers in 1981 was significantly below the number in 1979. In 1981, only 115,000 workers reported that they did migrant work, compared with 217,000 in 1979. The 1981 estimate of migrant workers should be interpreted cautiously because it is based on a relatively small number of cases and the applicable standard errors may not fully reflect the extent of sampling and nonsampling errors. The estimate of 115,000 has a 95-percent confidence interval of 73,000 to 157,000 workers, compared with 159,000 to 275,000 workers for the 1979 estimate of 217,000 migrant farmworkers. Because of the low statistical reliability associated with the small estimate of migrant workers, some categories of data that have been published in previous issues of The Hired Farm Working Force are not presented for 1981.

Table 7--Number and distribution of hired farmworkers, by crop and livestock activity and racial/ethnic groups, 1981

Type of crop or livestock activity 1/	Whites		Hispanics		Blacks and others		Total 2/	
	Number	Distribution	Number	Distribution	Number	Distribution	Number	Distribution
	Thousands	Percent	Thousands	Percent	Thousands	Percent	Thousands	Percent
Grain	444	24	14	4	30	9	488	20
Cotton	34	2	44	14	36	11	115	5
Tobacco	183	10	4	1	[illegible]	27	277	11
Other field crops	284	16	38	12	[illegible]	11	358	14
Vegetables	143	8	108	33	55	16	307	12
Fruit and tree nuts	147	8	78	24	47	14	272	11
Beef cattle	145	8	11	3	20	6	176	7
Dairy	161	9	5	2	4	1	169	7
Other livestock	116	6	6	2	5	1	127	5
Nursery	52	3	13	4	10	3	75	3
Other	115	6	6	2	6	2	128	5
Total	1,624	100	328	100	340	100	2,492	100

1/ A worker was assigned to the crop or livestock activity for which he or she worked the greatest number of days during the year.

2/ Numbers and percentages may not add to totals due to rounding.

Migrant workers are defined as those individuals who travel across county or State boundaries and stay overnight to do farmwork for cash wages or salary. In 1981, migrants made up 5 percent of all farmworkers, and they were mostly white males, under 25 years of age, who spent most of the year out of the labor force as students (tables 8 and 9). Over half the migrants worked fewer than 75 days in the year at farmwork.

Migrant farmworkers earned an annual average of $3,995 in 1981 from farmwork and nonfarmwork, about 68 percent of which came from farmwork. Thirty-seven percent of the migrants did hired farmwork as their primary occupation in 1981. Another 50 percent were not in the labor force; that is, they either attended school, kept house, or were retired or disabled. Migrant farmworkers who headed households made up 38 percent of all migrants.

About 40 percent of all migrants had completed high school, and about 40 percent of these graduates had some college education. However, some migrants had relatively low levels of education. Thirty-four percent had less than a ninth grade education and 7 percent were classified as functionally illiterate, having attended fewer than five years of school. These percentages were similar for migrant workers 25 years of age and over.

The backgrounds of migrant and nonmigrant farmworkers did not differ significantly (tables 8 and 9). Migrant workers were very similar to the rest of the hired farm working force in that both were made up predominantly of young males who spent only a small portion of their time at farmwork, probably to supplement other sources of income. The average annual earnings from farmwork and nonfarmwork for migrants and nonmigrants were $3,995 and $4,314, respectively. These earning levels were not significantly different, nor was there a significant difference between their annual average farm earnings.

TRENDS

Over the past 10 years, some characteristics of hired farmworkers have changed, although the number of workers has remained relatively stable (table 10). Whites made up a larger proportion of workers during the 1979-81 period than they did during the 1969-71 period. The number of black and other workers has declined by almost 38 percent during that time. Comparable data on Hispanic farmworkers are not available for both periods. Prior to 1975, data for Hispanic workers were included in either white or black and other categories based on the individual's race.

The ages of workers also changed. Fewer young people (ages 14 to 17 years) apparently entered hired farmwork. However, the number of workers 18 to 34 years of age increased, possibly indicating that workers stay in farmwork longer and depend more on their farm earnings. The number of workers 45 years of age and over decreased (table 10). These workers may have left farmwork either for nonfarm employment or early retirement.

Table 8--Migrant and nonmigrant farmworkers, by demographic characteristics, 1981

Demographic characteristics	Migrant		Nonmigrant	
	Number	Distribution	Number	Distribution
	Thousands	Percent	Thousands	Percent
Total 1/	115	100	2,377	100
Racial/ethnic groups:				
Whites	88	75	1,736	73
Hispanics	19	17	309	13
Blacks and others	9	8	331	14
Sex and age (years):				
Male	96	100	1,823	100
14-17	28	29	430	24
18-24	29	30	574	31
25-34	11	11	366	20
35-44	9	9	170	9
45-54	15	16	112	6
55 and over	3	3	171	9
Female	20	100	554	100
14-17	3	2/	144	26
18-34	8	2/	270	49
35-54	6	2/	105	19
55 and over	3	2/	35	6
Household status:				
Household heads	44	38	1,003	42
Other household members	72	63	1,374	58
Years of schooling completed by all workers:				
0-4	8	7	172	7
5-8	31	27	525	22
9-11	30	26	743	31
12	27	23	609	26
13 and over	19	17	327	14
Census regions:				
Northeast	5	4	199	8
North Central	24	21	664	28
South	42	37	962	40
West	44	38	552	23

1/ Numbers and percentages may not add to totals due to rounding.
2/ Percentages not shown where base is fewer than 50,000.

Table 9--Migrant and nonmigrant farmworkers, by employment and earnings characteristics, 1981

Demographic characteristics	Migrant		Nonmigrant	
	Number	Distribution	Number	Distribution
	Thousands	Percent	Thousands	Percent
Total 1/	115	100	2,377	100
Primary employment status:				
Farmwork	43	37	753	32
Hired farmwork	43	37	663	28
Without nonfarmwork	38	33	564	24
With nonfarmwork	5	4	100	4
Other farmwork 2/	0	—	90	4
Nonfarmwork	12	10	408	17
Unemployed	4	3	83	3
Not in labor force	57	50	1,133	48
Keeping house	5	4	194	8
Attending school	50	43	808	34
Other	1	1	131	6
Days of farmwork:				
Fewer than 25	24	21	945	40
25-74	37	32	501	21
75-149	12	10	299	12
150-249	28	24	253	11
250 and over	15	13	379	16
Farm and nonfarm earnings:				
Less than $500	19	17	523	22
$500-999	18	15	231	10
$1,000-2,499	18	15	441	19
$2,500-3,999	13	11	272	11
$4,000-5,499	11	9	161	7
$5,500-7,499	19	17	219	9
$7,500-9,999	7	6	222	9
$10,000 and over	11	9	308	13
Farm earnings:				
Less than $500	28	24	943	40
$500-999	19	16	291	12
$1,000-2,499	23	20	420	18
$2,500-3,999	11	9	175	7
$4,000-5,499	11	9	109	5
$5,500-7,499	17	15	145	6
$7,500-9,999	4	3	141	6
$10,000 and over	3	3	152	6

-- = not applicable.
1/ Numbers and percentages may not add to totals due to rounding.
2/ Includes operating a farm and unpaid family labor.

Table 10--Number of hired farmworkers, by selected characteristics, averages for 1969-71 and 1979-81

Item	3-year average	2-year average 1/	Changes, 1969-71 to 1979-81	Percentage of total	
	1969-71	1979-81		1969-71	1979-81
	-----Thousands-----		----------Percent----------		
Total 2/	2,536	2,527	1.2	100	100
Race: 3/					
Whites	1,975	2,222	12.5*	78	86
Blacks and others	561	350	-37.6**	22	14
Age (years):					
14-17	849	656	-22.7**	33	26
18-24	559	781	39.7**	22	30
25-34	315	478	51.7**	12	19
35-44	252	259	2.8	10	10
45-54	238	171	-28.2*	9	7
55-64	200	116	-42.0**	8	5
65 and over	124	111	-10.5	5	4
Region:					
Northeast	240	196	-18.3	9	8
North Central	609	737	21.0*	24	29
South	1,090	1,038	-4.8	43	40
West	598	601	.5	24	23
Days of farmwork:					
Fewer than 25	1,130	934	-17.3**	45	36
25-74	663	605	-8.7	26	24
75-149	255	317	24.3	10	12
150-249	191	308	61.3**	7	12
250 and over	297	409	37.7**	12	16
Migratory status:					
Migratory	208	166	-20.2	8	6
Nonmigratory	2,328	2,406	3.3	92	94
Primary employment status:					
Nonfarmwork	376	458	21.8	15	18
Hired farmwork	517	731	41.4**	20	29

1/ A 2-year average for 1979 and 1981 was used because the hired farm working force survey became biennial after 1977. Data for 1980 are not available.
2/ Percentages and numbers may not add to totals due to rounding.
3/ Hispanic data were not available for hired farmworkers for 1969-71.
* Significant at the 90-percent confidence level.
** Significant at the 95-percent confidence level.

The South still had more hired farmworkers than other regions but had not gained in relative share of workers. The only region showing a significant change was the North Central Region, where the number of workers increased by 21 percent.

Hired farmworkers are working more days a year at farmwork than they did 10 years ago, thus suggesting stronger attachments to farmwork for their primary source of earnings. While the largest proportion of workers still work fewer than 25 days at farmwork, their numbers have declined by 17 percent. The number of regular workers, however, has increased by almost two-thirds, and year-round workers have increased by over one-third. Overall, the number of worker-days increased from 198 million in the 1969-71 period to 257 million in the 1979-81 period. These increases are due in part to increased farm sizes, which require a larger hired farm work force to supplement family labor.

APPENDIX I

Appendix table 1--All hired farmworkers: Distribution by racial/ethnic groups and selected characteristics, 1981

Characteristics	Total	Whites	Hispanics	Blacks and others
		Thousands		
All workers	2,492	1,824	328	340
Primary employment status:				
Farmwork	796	490	170	135
Hired farmwork	706	403	170	133
Without nonfarmwork	601	320	158	123
With nonfarmwork	105	83	11	10
Other farmwork 1/	90	87	0	2
Nonfarmwork	420	351	39	30
Unemployed	86	60	13	14
Not in labor force	1,189	923	106	161
Keeping house	199	101	46	52
Attending school	858	738	39	81
Other	132	84	21	28
Residence and age (years):				
All workers	2,492	1,824	328	340
14-17	605	513	46	47
18-24	760	603	76	82
25-34	498	351	85	61
35-44	236	142	56	38
45-54	180	93	41	46
55-64	104	51	16	36
65 and over	108	71	7	29
Nonfarm residence	2,083	1,479	296	308
14-17	535	449	41	45
18-24	622	477	73	71
25-34	419	287	75	56
35-44	187	105	47	35
45-54	152	74	38	41
55-64	81	30	15	36
65 and over	88	56	7	24
Years of education completed by workers 25 and over:				
All workers	1,126	709	206	212
0-4	159	31	76	53
5-8	296	132	91	72
9-11	165	112	13	40
12	308	264	18	27
13 and over	198	170	8	20
Migratory status:				
Migratory	115	88	19	9
Nonmigratory	2,377	1,736	309	331
Standard Federal Regions:				
I	60	60	0	0
II	101	87	6	8
III	119	106	0	13
IV	567	347	18	201
V	380	377	3	0
VI	384	229	102	53
VII	269	258	6	6
VIII	107	98	5	4
IX	334	115	165	54
X	172	148	23	2
Census regions:				
Northeast	204	190	6	8
North Central	688	672	8	8
South	1,004	627	113	265
West	595	335	201	59
Days of farmwork:				
Fewer than 25	969	781	69	119
25-74	538	409	57	73
75-149	310	198	72	40
150-249	281	150	70	61
250 and over	394	285	61	48
Household status:				
Heads	1,046	752	142	152
Other members	1,446	1,072	185	189

Continued--

Appendix table 1--All hired farmworkers: Distribution by racial/ethnic groups and selected characteristics, 1981--continued

Characteristics	Total	Whites	Hispanics	Blacks and others
		Percent		
All workers	100	100	100	100
Primary employment status:				
Farmwork	32	27	52	40
Hired farmwork	28	22	52	39
Without nonfarmwork	24	18	48	36
With nonfarmwork	4	5	4	3
Other farmwork 1/	4	5	0	1
Nonfarmwork	17	19	12	9
Unemployed	3	3	4	4
Not in labor force	48	51	32	47
Keeping house	8	6	14	15
Attending school	34	40	12	24
Other	5	5	6	8
Residence and age (years):				
All workers	100	100	100	100
14-17	24	28	14	14
18-24	31	33	23	24
25-34	20	19	26	18
35-44	9	8	17	11
45-54	7	5	12	14
55-64	4	3	5	11
65 and over	4	4	2	9
Nonfarm residence	100	100	100	100
14-17	26	30	14	15
18-24	30	32	25	23
25-34	20	19	25	18
35-44	9	7	16	11
45-54	7	5	13	13
55-64	4	2	5	12
65 and over	4	4	2	8
Years of education completed by workers 25 and over:				
All workers	100	100	100	100
0-4	14	4	37	25
5-8	26	19	44	34
9-11	15	16	6	19
12	27	37	9	13
13 and over	18	24	4	9
Migratory status:				
Migratory	5	5	6	3
Nonmigratory	95	95	94	97
Standard Federal Regions:				
I	2	3	0	0
II	4	5	2	2
III	5	6	0	4
IV	23	19	6	59
V	15	21	1	0
VI	15	13	31	15
VII	11	14	2	2
VIII	4	5	2	1
IX	13	6	51	16
X	7	8	7	0
Census regions:				
Northeast	8	10	2	2
North Central	28	37	2	2
South	40	34	34	78
West	24	18	61	17
Days of farmwork:				
Fewer than 25	39	43	21	35
25-74	22	22	17	21
75-149	12	11	22	12
150-249	11	8	21	18
250 and over	16	16	19	14
Household status:				
Heads	42	41	43	45
Other members	58	59	57	55

Zeros indicate estimate was fewer than 500.
1/ Includes operating a farm and unpaid family labor.

Appendix table 2--All hired farmworkers: Distribution by racial/ethnic groups, sex, and selected characteristics, 1981

Characteristics	Total		Whites		Hispanics		Blacks and others	
	Male	Female	Male	Female	Male	Female	Male	Female
	Thousands							
All workers	1,918	574	1,434	390	237	90	247	93
Primary employment status:								
Farmwork	721	75	450	40	149	21	122	14
Hired farmwork	636	70	368	35	148	21	120	14
Without nonfarmwork	536	66	288	32	137	21	111	12
With nonfarmwork	100	4	80	3	11	0	9	2
Other farmwork 1/	85	5	82	5	0	0	2	0
Nonfarmwork	325	96	268	83	36	3	22	9
Unemployed	83	3	58	2	12	1	13	1
Not in labor force	790	400	658	265	42	64	91	70
Keeping house	15	184	13	89	1	45	2	50
Attending school	653	205	572	166	20	19	61	20
Other	122	10	73	10	21	0	28	0
Residence and age (years):								
All workers	1,918	574	1,434	390	237	90	247	93
14-17	458	147	396	116	23	22	39	8
18-24	603	158	481	121	63	13	59	23
25-34	377	121	272	79	67	18	38	24
35-44	179	58	112	29	41	16	26	12
45-54	127	53	67	26	24	16	35	11
55-64	82	22	43	8	12	4	27	9
65 and over	92	16	61	11	7	0	24	5
Nonfarm residence	1,592	490	1,162	317	212	84	219	89
14-17	405	131	348	101	20	21	37	8
18-24	487	135	376	101	61	13	50	21
25-34	317	102	222	65	60	15	35	22
35-44	143	44	88	17	33	14	22	12
45-54	102	50	51	22	21	16	29	11
55-64	66	15	28	2	10	4	27	9
65 and over	73	14	47	9	7	0	19	5
Years of education completed by workers 25 and over:								
All workers	857	269	556	153	152	54	150	62
0-4	121	38	31	0	51	25	39	13
5-8	244	52	120	12	67	25	57	15
9-11	131	34	91	21	13	0	27	13
12	220	88	193	70	14	3	13	14
13 and over	141	57	120	50	7	2	14	6
Migratory status:								
Migratory	96	20	74	14	13	6	9	0
Nonmigratory	1,823	554	1,360	377	225	84	238	93
Standard Federal Regions:								
I	39	21	39	21	0	0	0	0
II	79	22	67	19	4	2	8	0
III	103	16	90	16	0	0	13	0
IV	435	132	278	69	13	5	143	58
V	288	91	286	91	3	0	0	0
VI	310	74	197	32	69	33	43	10
VII	204	65	195	63	5	1	4	2
VIII	93	14	85	12	3	2	4	0
IX	252	82	92	23	129	36	31	23
X	116	56	103	44	11	12	1	0
Census regions:								
Northeast	161	43	149	41	4	2	8	0
North Central	527	161	514	159	8	1	6	2
South	785	219	510	117	78	35	198	67
West	444	151	261	74	148	52	35	24
Days of farmwork:								
Fewer than 25	658	312	553	228	38	31	67	52
25-74	390	149	312	98	30	26	48	25
75-149	247	63	163	35	51	21	34	7
150-249	254	26	141	9	58	12	55	6
250 and over	369	24	264	21	61	0	45	3

Continued--

Appendix table 2--All hired farmworkers: Distribution by racial/ethnic groups, sex, and selected characteristics, 1981--continued

Characteristics	Total		Whites		Hispanics		Blacks and others	
	Male	Female	Male	Female	Male	Female	Male	Female
				Percent				
All workers	100	100	100	100	100	100	100	100
Primary employment status:								
Farmwork	38	13	31	10	63	24	49	15
Hired farmwork	33	12	26	9	62	24	48	15
Without nonfarmwork	28	11	20	8	58	24	45	13
With nonfarmwork	5	1	6	1	5	0	3	2
Other farmwork 1/	4	1	6	1	0	0	1	0
Nonfarmwork	17	17	19	21	15	4	9	9
Unemployed	4	1	4	0	5	1	5	1
Not in labor force	41	70	46	68	17	71	37	75
Keeping house	1	32	1	23	0	50	1	54
Attending school	34	36	40	43	9	21	25	21
Other	6	2	5	3	9	0	11	0
Residence and age (years):								
All workers	100	100	100	100	100	100	100	100
14-17	24	26	28	30	10	25	16	9
18-24	31	27	34	31	26	15	24	25
25-34	20	21	19	20	28	20	15	26
35-44	9	10	8	8	17	17	11	13
45-54	7	9	5	7	10	18	14	12
55-64	4	4	3	2	5	5	11	10
65 and over	5	3	4	3	3	0	10	6
Nonfarm residence	100	100	100	100	100	100	100	100
14-17	25	27	30	32	9	25	17	9
18-24	31	28	32	32	29	1>	23	24
25-34	20	21	19	21	28	18	16	25
35-44	9	9	7	5	16	17	10	13
45-54	6	10	4	7	10	19	13	12
55-64	4	3	3	1	5	5	12	10
65 and over	5	3	4	3	3	0	9	6
Years of education completed by workers 25 and over:								
All workers	100	100	100	100	100	100	100	100
0-4	14	14	6	0	34	46	26	21
5-8	28	19	22	8	44	46	38	24
9-11	15	13	16	14	8	0	18	21
12	26	33	35	46	9	5	9	23
13 and over	16	21	21	33	5	4	9	10
Migratory status:								
Migratory	5	3	5	4	5	7	4	0
Nonmigratory	95	97	95	96	95	93	96	100
Standard Federal Regions:								
I	2	4	3	5	0	0	0	0
II	4	4	5	5	2	2	3	0
III	5	3	6	4	0	0	5	0
IV	23	23	19	18	6	5	58	62
V	15	16	20	23	1	0	0	0
VI	16	13	14	8	29	36	17	10
VII	11	11	14	16	2	1	2	2
VIII	5	2	6	3	1	2	2	0
IX	13	14	6	6	54	40	12	25
X	6	10	7	11	5	13	1	0
Census regions:								
Northeast	8	7	10	10	2	2	3	0
North Central	27	28	36	41	3	1	2	2
South	41	38	36	30	33	39	80	72
West	23	26	18	19	62	58	14	26
Days of farmwork:								
Fewer than 25	34	54	39	58	16	35	27	56
25-74	20	26	22	25	13	29	19	27
75-149	13	11	11	9	21	23	14	7
150-249	13	5	10	2	24	13	22	7
250 and over	19	4	18	5	26	0	18	3

Zeros indicate estimate was fewer than 500.
1/ Includes operating a farm and unpaid family labor.

Appendix table 3--Hired farmworkers who did fewer than 25 days of farmwork: Distribution by racial/ethnic groups and selected characteristics, 1981

Characteristics	Total	Whites	Hispanics	Blacks and others
		Thousands		
All workers	969	781	69	119
Primary employment status:				
Farmwork	50	49	0	1
Hired farmwork	2	2	0	0
Without nonfarmwork	2	2	0	0
With nonfarmwork	0	0	0	0
Other farmwork 1/	48	47	0	1
Nonfarmwork	249	214	16	19
Unemployed	42	33	6	3
Not in labor force	629	486	47	96
Keeping house	106	55	14	36
Attending school	454	380	29	46
Other	69	51	4	14
Residence and age (years):				
All workers	969	781	69	119
14-17	333	280	24	29
18-24	279	236	16	26
25-34	167	133	15	19
35-44	60	42	5	12
45-54	52	34	9	9
55-64	25	18	0	7
65 and over	55	37	0	17
Nonfarm residence	859	687	64	108
14-17	304	256	21	27
18-24	248	209	15	24
25-34	147	117	14	16
35-44	55	38	5	12
45-54	48	31	9	9
55-64	17	10	0	7
65 and over	40	26	0	14
Years of education completed by workers 25 and over:				
All workers	358	265	29	64
0-4	32	9	3	20
5-8	83	53	13	17
9-11	49	31	6	12
12	124	108	6	10
13 and over	70	63	2	5
Migratory status:				
Migratory	24	23	1	1
Nonmigratory	945	758	68	118
Standard Federal Regions:				
I	24	24	0	0
II	24	21	0	3
III	40	35	0	5
IV	229	154	0	75
V	188	188	0	0
VI	150	94	43	14
VII	143	139	2	2
VIII	39	34	2	3
IX	73	39	19	15
X	59	54	3	1
Census regions:				
Northeast	63	60	0	3
North Central	345	338	2	4
South	398	265	41	92
West	163	118	26	19
Household status:				
Heads	325	268	15	43
Other members	644	513	55	76

Continued--

Appendix table 3--Hired farmworkers who did fewer than 25 days of farmwork: Distribution by racial/ethnic groups and selected characteristics, 1981--continued

Characteristics	Total	Whites	Hispanics	Blacks and others
		Percent		
All workers	100	100	100	100
Primary employment status:				
Farmwork	5	6	0	1
Hired farmwork	0	0	0	0
Without nonfarmwork	0	0	0	0
With nonfarmwork	0	0	0	0
Other farmwork 1/	5	6	0	1
Nonfarmwork	26	27	23	16
Unemployed	4	4	9	2
Not in labor force	65	62	67	81
Keeping house	11	7	21	30
Attending school	47	49	41	38
Other	7	7	6	12
Residence and age (years):				
All workers	100	100	100	100
14-17	34	36	35	24
18-24	29	30	23	22
25-34	17	17	22	16
35-44	6	5	8	10
45-54	5	4	12	7
55-64	3	2	0	6
65 and over	6	5	0	15
Nonfarm residence	100	100	100	100
14-17	35	37	33	25
18-24	29	30	23	22
25-34	17	17	22	15
35-44	6	6	8	11
45-54	6	5	14	8
55-64	2	1	0	6
65 and over	5	4	0	13
Years of education completed by workers 25 and over:				
All workers	100	100	100	100
0-4	9	3	--	31
5-8	23	20	--	27
9-11	14	12	--	19
12	35	41	--	16
13 and over	20	24	--	8
Migratory status:				
Migratory	2	3	1	1
Nonmigratory	98	97	99	99
Standard Federal Regions:				
I	2	3	0	0
II	3	3	0	3
III	4	5	0	4
IV	24	20	0	63
V	19	24	0	0
VI	16	12	62	12
VII	15	18	3	2
VIII	4	4	3	3
IX	8	5	28	12
X	6	7	5	1
Census regions:				
Northeast	7	8	0	3
North Central	36	43	3	4
South	41	34	60	78
West	17	15	38	16
Household status:				
Heads	34	34	21	36
Other members	66	66	79	64

Zeros indicate estimate was fewer than 500.
-- = base was fewer than 50,000 persons.
1/ Includes operating a farm and unpaid family labor.

Appendix table 4--Hired farmworkers who did 25 to 149 days of farmwork: Distribution by racial/ethnic groups and selected characteristics, 1981

Characteristics	Total	Whites	Hispanics	Blacks and others
		Thousands		
All workers	848	607	128	113
Primary employment status:				
Farmwork	147	76	45	26
Hired farmwork	117	47	45	25
Without nonfarmwork	94	29	40	25
With nonfarmwork	23	18	5	0
Other farmwork 1/	30	29	0	1
Nonfarmwork	157	126	21	11
Unemployed	42	24	7	11
Not in labor force	502	382	55	65
Keeping house	89	43	29	16
Attending school	355	311	9	35
Other	58	27	17	14
Residence and age (years):				
All workers	848	607	128	113
14-17	236	200	18	18
18-24	298	232	28	38
25-34	147	93	33	21
35-44	63	35	19	9
45-54	47	16	18	13
55-64	25	12	7	6
65 and over	33	20	5	7
Nonfarm residence	733	503	123	106
14-17	206	172	16	18
18-24	250	186	28	36
25-34	132	81	32	19
35-44	53	27	17	9
45-54	43	13	18	12
55-64	20	7	7	6
65 and over	29	18	5	6
Years of education completed by workers 25 and over:				
All workers	314	175	82	57
0-4	51	6	36	10
5-8	89	31	38	20
9-11	32	22	2	8
12	77	65	3	10
13 and over	65	52	4	9
Migratory status:				
Migratory	49	49	0	0
Nonmigratory	799	559	128	113
Standard Federal Regions:				
I	18	18	0	0
II	43	35	6	3
III	40	34	0	6
IV	194	123	5	66
V	122	120	3	0
VI	115	72	25	19
VII	82	77	3	2
VIII	43	39	2	1
IX	116	31	69	16
X	74	59	15	0
Census regions:				
Northeast	74	65	6	3
North Central	222	214	6	2
South	331	211	29	91
West	222	117	87	17
Household status:				
Heads	272	197	43	33
Other members	576	411	85	80

Continued--

Appendix table 4--Hired farmworkers who did 25 to 149 days of farmwork: Distribution by racial/ethnic groups and selected characteristics, 1981--continued

Characteristics	Total	Whites	Hispanics	Blacks and others
		Percent		
All workers	100	100	100	100
Primary employment status:				
Farmwork	17	13	35	23
Hired farmwork	14	8	35	22
Without nonfarmwork	11	5	31	22
With nonfarmwork	3	3	4	0
Other farmwork 1/	4	5	0	1
Nonfarmwork	19	21	17	9
Unemployed	5	4	5	10
Not in labor force	59	63	43	58
Keeping house	10	7	23	14
Attending school	42	51	7	31
Other	7	4	13	12
Residence and age (years):				
All workers	100	100	100	100
14-17	28	33	14	16
18-24	35	38	22	33
25-34	17	15	26	19
35-44	7	6	15	8
45-54	6	3	14	12
55-64	3	2	6	5
65 and over	4	3	4	7
Nonfarm residence	100	100	100	100
14-17	28	34	13	17
18-24	34	37	23	34
25-34	18	16	26	18
35-44	7	5	14	8
45-54	6	3	15	11
55-64	3	1	6	6
65 and over	4	4	4	6
Years of education completed by workers 25 and over:				
All workers	100	100	100	100
0-4	16	3	44	18
5-8	28	18	46	35
9-11	10	13	2	14
12	25	37	4	18
13 and over	21	30	5	16
Migratory status:				
Migratory	6	8	0	0
Nonmigratory	94	92	100	100
Standard Federal Regions:				
I	2	3	0	0
II	5	6	5	2
III	5	6	0	
IV	23	20	4	59
V	14	20	2	0
VI	14	12	19	17
VII	10	13	2	1
VIII	5	6	2	1
IX	14	5	54	14
X	9	10	12	0
Census regions:				
Northeast	9	11	5	2
North Central	26	35	4	2
South	39	35	23	81
West	26	19	68	15
Household status:				
Heads	32	32	33	29
Other members	68	68	67	71

Zeros indicate estimate was fewer than 500.
1/ Includes operating a farm and unpaid family labor.

Appendix table 5--Hired farmworkers who did 150 or more days of farmwork: Distribution by racial/ethnic groups and selected characteristics, 1981

Characteristics	Total	Whites	Hispanics	Blacks and others
		Thousands		
All workers	674	435	130	109
Primary employment status:				
Farmwork	598	366	124	108
Hired farmwork	587	354	124	108
Without nonfarmwork	505	289	118	98
With nonfarmwork	82	65	6	10
Other farmwork 1/	12	12	0	0
Nonfarmwork	14	12	2	1
Unemployed	3	3	0	0
Not in labor force	59	55	4	0
Keeping house	5	3	2	0
Attending school	49	47	2	0
Other	6	6	0	0
Residence and age (years):				
All workers	674	435	130	109
14-17	36	33	4	0
18-24	184	135	32	18
25-34	183	125	37	21
35-44	114	65	32	17
45-54	81	42	14	25
55-64	54	22	9	24
65 and over	20	14	2	4
Nonfarm residence	491	289	108	94
14-17	25	21	4	0
18-24	123	83	30	11
25-34	139	89	29	21
35-44	79	41	25	13
45-54	61	30	11	20
55-64	44	13	7	24
65 and over	19	12	2	4
Years of education completed by workers 25 and over:				
All workers	454	268	95	91
0-4	76	15	38	23
5-8	124	48	41	35
9-11	83	58	5	20
12	107	91	8	7
13 and over	64	55	3	6
Migratory status:				
Migratory	42	16	18	8
Nonmigratory	632	419	113	100
Standard Federal Regions:				
I	18	18	0	0
II	34	31	0	2
III	38	36	0	2
IV	143	70	13	60
V	70	70	0	0
VI	118	64	35	20
VII	44	42	1	2
VIII	25	25	1	0
IX	144	45	77	23
X	39	35	5	0
Census regions:				
Northeast	67	64	0	2
North Central	122	120	1	2
South	275	151	43	81
West	210	100	87	24
Household status:				
Heads	449	288	85	76
Other members	226	148	45	33

Continued--

Appendix table 5--Hired farmworkers who did 150 or more days of farmwork: Distribution by racial/ethnic groups and selected characteristics, 1981--continued

Characteristics	Total	Whites	Hispanics	Blacks and others
		Percent		
All workers	100	100	100	100
Primary employment status:				
Farmwork	89	84	96	99
Hired farmwork	87	81	96	99
Without nonfarmwork	75	66	91	90
With nonfarmwork	12	15	5	9
Other farmwork 1/	2	3	0	0
Nonfarmwork	2	3	1	1
Unemployed	0	1	0	0
Not in labor force	9	13	3	0
Keeping house	1	1	2	0
Attending school	7	11	1	0
Other	1	1	0	0
Residence and age (years):				
All workers	100	100	100	100
14-17	5	7	3	0
18-24	27	31	24	16
25-34	27	29	28	20
35-44	17	15	25	16
45-54	12	10	11	23
55-64	8	5	7	22
65 and over	3	3	2	4
Nonfarm residence	100	100	100	100
14-17	5	7	4	0
18-24	25	29	28	12
25-34	28	31	27	22
35-44	16	14	23	14
45-54	12	10	10	21
55-64	9	4	6	26
65 and over	4	4	2	4
Years of education completed by workers 25 and over:				
All workers	100	100	100	100
0-4	17	6	40	25
5-8	27	18	43	38
9-11	18	22	5	22
12	24	34	8	8
13 and over	14	20	3	7
Migratory status:				
Migratory	6	4	14	8
Nonmigratory	94	96	86	92
Standard Federal Regions:				
I	3	4	0	0
II	5	7	0	2
III	6	8	0	2
IV	21	16	10	55
V	10	16	0	0
VI	17	15	26	18
VII	7	10	0	2
VIII	4	6	1	0
IX	21	10	59	21
X	6	8	3	0
Census regions:				
Northeast	10	15	0	2
North Central	18	28	0	2
South	41	35	33	75
West	31	23	67	22
Household status:				
Heads	67	66	65	70
Other members	33	34	35	30

Zeros indicate estimate was fewer than 500.
1/ Includes operating a farm and unpaid family labor.

Appendix table 6--All hired farmworkers: Days of farmwork by selected characteristics, 1981

Characteristics	Number of hired farmworkers					
	Total	By days worked				
		Fewer than 25	25 to 74	75 to 149	150 to 249	250 and over
	Thousands					
All workers	2,492	969	538	310	281	394
Ethnic groups:						
Whites	1,824	781	409	198	150	285
Hispanics	328	69	57	72	70	61
Blacks and others	340	119	73	40	61	48
Primary employment status:						
Farmwork	796	50	43	104	229	370
Hired farmwork	706	2	22	95	224	363
Without nonfarmwork	601	2	17	78	170	335
With nonfarmwork	105	0	6	17	54	28
Other farmwork 1/	90	48	21	9	5	7
Nonfarmwork	420	249	105	53	10	5
Unemployed	86	42	24	18	3	0
Not in labor force	1,189	629	366	136	40	19
Keeping house	199	106	70	19	3	2
Attending school	858	454	272	83	31	18
Other	132	69	24	34	6	0
Sex and age (years):						
Males	1,918	658	390	247	254	369
14-17	458	229	155	38	25	10
18-24	603	200	132	96	72	103
25-34	377	116	47	45	65	103
35-44	179	33	18	22	28	78
45-54	127	19	16	18	27	46
55-64	82	18	8	11	27	18
65 and over	92	42	13	17	10	10
Females	574	312	149	63	26	24
14-17	147	103	32	11	0	0
18-24	158	79	59	10	7	3
25-34	121	52	33	22	6	8
35-44	58	26	11	12	3	5
45-54	53	33	11	2	4	3
55-64	22	6	1	5	5	4
65 and over	16	13	1	1	0	1
Residence:						
Farm	409	111	73	43	57	126
Nonfarm	2,083	859	465	267	223	268
Migratory status:						
Migratory	115	24	37	12	28	15
Nonmigratory	2,377	945	501	299	253	379
Standard Federal Regions:						
I	60	24	11	7	10	8
II	101	24	29	14	11	22
III	119	40	33	7	4	34
IV	567	229	134	60	77	66
V	380	188	82	41	27	43
VI	384	150	68	48	42	76
VII	269	143	45	37	18	26
VIII	107	39	27	16	8	18
IX	334	73	60	56	66	78
X	172	59	50	23	18	21
Census regions:						
Northeast	204	63	50	24	22	44
North Central	688	345	136	86	48	74
South	1,004	398	221	110	120	155
West	595	163	132	90	90	121

Continued--

Appendix table 6--All hired farmworkers: Days of farmwork by selected characteristics, 1981--continued

Characteristics	Number of hired farmworkers					
	Total	By days worked				
		Fewer than 25	25 to 74	75 to 149	150 to 249	250 and over
	Percent					
All workers	100	39	22	12	11	16
Ethnic groups:						
Whites	100	43	22	11	8	16
Hispanics	100	21	17	22	21	19
Blacks and others	100	35	21	12	18	14
Primary employment status:						
Farmwork	100	6	5	13	29	46
Hired farmwork	100	0	3	13	32	51
Without nonfarmwork	100	0	3	13	28	56
With nonfarmwork	100	0	6	16	51	27
Other farmwork 1/	100	53	23	10	5	8
Nonfarmwork	100	59	25	13	2	1
Unemployed	100	48	28	21	3	0
Not in labor force	100	53	31	11	3	2
Keeping house	100	53	35	9	1	1
Attending school	100	53	32	10	4	2
Other	100	52	18	26	4	0
Sex and age (years):						
Males	100	34	20	13	13	19
14-17	100	50	34	8	6	2
18-24	100	33	22	16	12	17
25-34	100	31	13	12	17	27
35-44	100	18	10	12	16	44
45-54	100	15	13	14	21	37
55-64	100	22	10	13	33	22
65 and over	100	46	15	18	10	11
Females	100	54	26	11	5	4
14-17	100	70	22	8	0	0
18-24	100	50	38	6	4	2
25-34	100	43	27	18	5	7
35-44	100	46	20	20	6	8
45-54	100	61	20	4	8	6
55-64	100	--	--	--	--	--
65 and over	100	--	--	--	--	--
Residence						
Farm	100	27	18	10	14	31
Nonfarm	100	41	22	13	11	13
Migratory status:						
Migratory	100	21	32	10	24	13
Nonmigratory	100	40	21	13	11	16
Standard Federal Regions:						
I	100	39	18	12	16	14
II	100	24	28	14	11	22
III	100	34	28	6	4	29
IV	100	40	24	11	14	12
V	100	49	22	11	7	11
VI	100	39	18	13	11	20
VII	100	53	17	14	7	10
VIII	100	36	25	15	7	17
IX	100	22	18	17	20	23
X	100	34	29	14	11	12
Census regions:						
Northeast	100	31	25	12	11	22
North Central	100	50	20	12	7	11
South	100	40	22	11	12	15
West	100	27	22	15	15	20

Zeros indicate estimate was fewer than 500.
-- = base was fewer than 50,000 persons.
1/ Includes operating a farm and unpaid family labor.

Appendix table 7--All hired farmworkers: Demographic characteristics by average number of days worked and earnings, 1981

Characteristics	Thousands of workers	Farm and nonfarm earnings	Farmwork			Workers who did hired farmwork only			
			Days worked	Earnings		Thousands of Workers	Days worked	Earnings	
				Daily	Annual			Daily	Annual
	Number	Dollars	Number	----Dollars----		----Number----		----Dollars----	
All workers	2,492	4,299	98	27.20	2,659	1,478	129	27.64	3,557
Ethnic groups and sex:									
Whites	1,824	4,288	91	26.03	2,359	963	125	26.24	3,293
Hispanics	328	5,340	131	32.89	4,319	259	150	33.28	4,995
Blacks and others	340	3,358	104	25.71	2,668	256	119	25.98	3,098
Males	1,918	4,829	112	27.47	3,073	1,145	147	27.86	4,092
Whites	1,434	4,713	102	26.45	2,710	781	138	26.63	3,682
Hispanics	237	6,447	155	33.26	5,155	178	186	33.64	6,256
Blacks and others	247	3,948	125	25.42	3,175	186	146	25.70	3,745
Females	574	2,526	51	25.19	1,276	333	66	25.94	1,719
Whites	390	2,725	47	22.71	1,071	182	71	22.98	1,622
Hispanics	90	2,420	69	30.72	2,114	81	71	31.18	2,228
Blacks and others	93	1,796	48	27.74	1,327	70	49	28.16	1,384
Sex and age (years):									
14-17	605	934	43	17.61	753	418	48	18.19	875
18-24	760	4,624	93	26.84	2,488	343	142	27.04	3,845
25-34	498	6,785	120	30.70	3,684	252	176	31.73	5,584
35-44	236	6,405	159	29.10	4,631	169	195	28.85	5,633
45-54	180	5,460	146	27.35	3,980	122	186	28.41	5,279
55-64	104	4,597	147	27.82	4,077	86	158	27.84	4,406
65 and over	108	2,575	79	24.64	1,938	88	88	24.63	2,165
Males									
14-17	458	1,028	48	16.95	818	326	54	17.45	939
18-24	603	4,965	106	26.85	2,846	280	160	26.85	4,292
25-34	377	7,736	138	31.09	4,277	187	207	32.21	6,682
35-44	179	7,748	188	29.78	5,596	119	243	29.55	7,192
45-54	127	6,586	181	27.74	5,032	89	225	28.85	6,494
55-64	82	4,932	148	29.11	4,300	67	161	28.90	4,655
65 and over	92	2,769	86	24.98	2,152	77	94	24.89	2,349
Females									
14-17	147	640	26	21.51	550	92	28	23.34	644
18-24	158	3,317	42	26.76	1,115	63	64	29.18	1,876
25-34	121	3,811	65	28.14	1,829	65	85	28.37	2,404
35-44	58	2,225	70	23.41	1,628	49	--	--	--
45-54	53	2,791	60	24.55	1,484	34	--	--	--
55-64	22	--	--	--	--	19	--	--	--
65 and over	16	--	--	--	--	11	--	--	--
Household and migrant status:									
Household heads	1,046	6,876	139	29.96	4,151	584	200	30.22	6,057
Migratory	44	--	--	--	--	24	--	--	--
Nonmigratory	1,003	6,907	138	30.21	4,182	560	200	30.50	6,106
Other household members	1,446	2,434	68	23.13	1,579	895	82	23.51	1,926
Migratory	72	2,676	94	24.37	2,300	60	99	23.86	2,356
Nonmigratory	1,374	2,421	67	23.04	1,542	835	81	23.48	1,896
Years of education completed by workers 25 and over:									
All workers	1,126	5,888	131	29.05	3,799	717	169	29.43	4,981
0-4	159	4,593	143	29.52	4,217	140	153	29.62	4,544
5-8	296	5,116	138	28.68	3,949	217	163	28.98	4,737
9-11	165	5,860	160	27.65	4,410	113	195	28.17	5,487
12	308	6,333	111	29.82	3,303	160	154	30.39	4,674
13 and over	198	7,417	118	29.69	3,504	88	204	30.35	6,195

-- = base was fewer than 50,000 persons.

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Appendix table 8--All hired farmworkers: Employment characteristics by average number of days worked and earnings, 1981

Characteristics	Thousands of workers	Farm and nonfarm earnings	Farmwork			Workers who did hired farmwork only			
			Days worked	Earnings		Thousands of Workers	Days worked	Earnings	
				Daily	Annual			Daily	Annual
	Number	Dollars	Number	----Dollars----		----Number----		----Dollars----	
All workers	2,492	4,299	98	27.20	2,659	1,478	129	27.64	3,557
Primary employment status:									
Farmwork	796	6,720	218	29.35	6,387	671	226	29.30	6,613
Hired farmwork	706	7,258	238	29.39	6,981	601	245	29.33	7,172
Without nonfarmwork	601	7,172	245	29.33	7,172	601	245	29.33	7,172
With nonfarmwork	105	7,749	197	29.86	5,882	0			
Other farmwork 1/	90	2,494	62	28.04	1,725	70	64	28.44	1,825
Nonfarmwork	420	8,341	38	25.01	949	0			
Unemployed	86	2,550	44	28.40	1,242	41	--	--	--
Not in labor force	1,189	1,378	43	20.44	872	766	47	20.54	961
Keeping house	199	1,182	36	23.91	866	154	38	24.25	913
Attending school	858	1,307	44	18.60	809	516	49	18.41	894
Other	132	2,127	47	27.47	1,286	96	52	26.93	1,396
Residence, sex, and days of farmwork:									
Fewer than 25	969	2,756	9	22.76	216	444	10	21.79	222
25-74	538	2,799	45	24.85	1,126	274	45	24.64	1,108
75-149	310	4,081	107	24.85	2,650	195	107	25.73	2,742
150-249	281	6,669	198	29.84	5,908	206	201	30.12	6,051
250 and over	394	8,632	308	27.43	8,461	360	309	27.63	8,547
Nonfarm residence	2,083	4,266	88	27.80	2,436	1,173	117	28.36	3,321
Fewer than 25	859	2,906	10	22.55	216	376	11	21.43	226
25-74	465	2,934	45	25.05	1,132	225	45	24.61	1,113
75-149	267	4,246	106	25.19	2,683	165	107	25.88	2,758
150-249	223	6,802	198	30.19	5,980	168	201	30.49	6,116
250 and over	268	8,854	301	28.66	8,624	239	301	28.87	8,686
Males									
Fewer than 25	658	3,212	9	24.59	230	286	10	23.69	229
25-74	390	3,001	46	24.60	1,132	190	46	24.00	1,104
75-149	247	4,343	108	24.47	2,640	150	108	25.19	2,727
150-249	254	6,618	198	29.65	5,858	184	201	29.79	5,978
250 and over	369	8,733	308	27.81	8,554	336	308	28.02	8,640
Females									
Fewer than 25	312	1,792	10	19.04	185	158	11	18.77	208
25-74	149	2,270	43	25.54	1,109	84	43	26.19	1,115
75 and over	114	4,875	172	26.03	4,488	91	183	26.63	4,881
Migratory status and days of farmwork:									
Migratory	115	3,995	112	24.37	2,728	83	130	23.77	3,080
Fewer than 25	24	--	--	--	--	13	--	--	--
25-74	37	--	--	--	--	25	--	--	--
75-149	12	--	--	--	--	7	--	--	--
150 and over	42	--	--	--	--	38	--	--	--
Nonmigratory	2,377	4,314	97	27.35	2,656	1,395	129	27.87	3,585
Fewer than 25	945	2,751	9	22.70	213	430	10	21.51	214
25-149	799	3,305	68	24.99	1,705	437	72	25.50	1,824
150-249	253	6,755	199	30.09	5,980	182	202	30.53	6,162
250 and over	379	8,710	309	27.63	8,534	346	310	27.90	8,642

Zeros appear where estimate was fewer than 500.
-- = base was fewer than 50,000 persons.
1/ Includes operating a farm and unpaid family labor.

Appendix table 9--All hired farmworkers: Regions and racial/ethnic groups by average number of days worked and earnings, 1981

Characteristics	Thousands of workers	Farm and nonfarm earnings	Farmwork			Workers who did hired farmwork only			
			Days worked	Earnings		Thousands of Workers	Days worked	Earnings	
				Daily	Annual			Daily	Annual
	Number	Dollars	Number	----Dollars----		----Number----		----Dollars----	
All workers	2,492	4,299	98	27.20	2,659	1,478	129	27.64	3,557
Census regions:									
Northeast	204	4,400	115	25.82	2,977	109	156	27.41	4,268
Whites	190	4,457	117	25.41	2,967	100	157	26.88	4,234
Hispanics	6	--	--	--	--	4	--	--	--
Blacks and others	8	--	--	--	--	5	--	--	--
North Central	688	4,025	75	26.92	2,019	350	98	27.38	2,694
Whites	672	4,043	75	26.84	2,018	342	99	27.35	2,694
Hispanics	8	--	--	--	--	3	--	--	--
Blacks and others	8	--	--	--	--	5	--	--	--
South	1,004	3,786	97	22.95	2,217	627	126	22.67	2,856
Whites	627	3,987	91	21.90	2,003	345	129	21.15	2,718
Hispanics	113	4,435	114	27.27	3,115	81	137	27.41	3,744
Blacks and others	265	3,036	101	23.13	2,341	201	117	23.30	2,734
West	595	5,446	120	33.60	4,037	393	153	34.40	5,249
Whites	335	5,244	105	31.97	3,366	176	154	32.84	5,048
Hispanics	201	5,992	145	35.47	5,157	172	158	35.77	5,668
Blacks and others	59	4,738	119	34.04	4,037	45	--	--	--
Standard Federal Regions:									
I	60	4,547	100	22.56	2,246	29	--	--	--
Whites	60	4,547	100	22.56	2,246	29	--	--	--
Hispanics	0					0			
Blacks and others	0					0			
II	101	4,295	120	28.66	3,450	52	146	32.14	4,706
Whites	87	4,401	124	28.18	3,506	44	--	--	--
Hispanics	6	--	--	--	--	4	--	--	--
Blacks and others	8	--	--	--	--	5	--	--	--
III	119	3,744	123	17.84	2,193	76	176	17.42	3,065
Whites	106	4,019	128	18.18	2,318	68	185	17.79	3,282
Hispanics	0					0			
Blacks and Others	13	--	--	--	--	9	--	--	--
IV	567	3,450	89	22.38	2,000	356	116	22.32	2,599
Whites	347	3,630	80	21.38	1,720	186	112	21.14	2,377
Hispanics	18	--	--	--	--	18	--	--	--
Blacks and others	201	3,070	97	23.48	2,281	152	115	23.35	2,675
V	380	3,937	76	25.66	1,955	184	98	25.01	2,455
Whites	377	3,938	77	25.66	1,963	184	98	25.01	2,455
Hispanics	3	--	--	--	--	0			
Blacks and others	0					0			
VI	384	4,590	105	26.45	2,783	231	136	26.27	3,563
Whites	229	4,784	99	25.80	2,560	121	138	24.71	3,414
Hispanics	102	4,775	111	29.38	3,274	68	136	29.96	4,062
Blacks and others	53	3,385	119	23.49	2,800	42	--	--	--
VII	269	4,149	71	28.30	2,010	141	96	29.88	2,857
Whites	258	4,189	70	28.14	1,980	134	95	29.97	2,844
Hispanics	6	--	--	--	--	3	--	--	--
Blacks and others	6	--	--	--	--	4	--	--	--
VIII	107	4,742	99	27.18	2,701	59	143	27.55	3,946
Whites	98	4,697	102	26.87	2,751	55	145	27.16	3,938
Hispanics	5	--	--	--	--	3	--	--	--
Blacks and others	4	--	--	--	--	1	--	--	--
IX	334	6,161	137	37.05	5,077	253	160	37.12	5,948
Whites	115	6,678	130	37.92	4,931	68	184	36.97	6,809
Hispanics	165	6,326	145	37.26	5,418	141	159	37.57	5,971
Blacks and others	54	4,545	126	34.40	4,334	43	--	--	--
X	172	3,888	90	26.73	2,407	96	121	28.72	3,489
Whites	148	4,018	84	28.02	2,366	74	118	31.14	3,679
Hispanics	23	--	--	--	--	22	--	--	--
Blacks and others	2	--	--	--	--	1	--	--	--

Zeros appear where estimate was fewer than 500.
-- = base was fewer than 50,000 persons.

Appendix table 10--Hired farmworkers who did farmwork and nonfarmwork: Demographic characteristics by average number of days worked and earnings, 1981

Characteristics	Thousands of workers	Farm and nonfarm earnings	Farmwork			Nonfarmwork		
			Days worked	Earnings		Days worked	Earnings	
				Daily	Annual		Daily	Annual
	Number	Dollars	Number	----Dollars----		Number	----Dollars----	
All workers	1,014	5,381	53	25.63	1,350	125	32.18	4,031
Ethnic groups and sex:								
Whites	861	5,401	52	25.46	1,316	128	31.82	4,085
Hispanics	69	6,641	60	29.30	1,765	128	38.09	4,876
Blacks and others	84	4,149	57	24.00	1,362	91	30.66	2,787
Males	773	5,921	60	26.05	1,564	128	34.00	4,358
Whites	652	5,948	60	25.94	1,548	131	33.67	4,401
Hispanics	60	7,019	63	29.86	1,867	130	39.71	5,152
Blacks and others	61	4,565	62	23.38	1,442	100	31.32	3,123
Females	241	3,643	29	22.82	662	116	25.72	2,981
Whites	208	3,688	27	22.08	590	121	25.56	3,098
Hispanics	9	--	--	--	--	--	--	--
Blacks and others	23	--	--	--	--	--	--	--
Sex and age (years):								
14-17	188	1,066	31	15.59	482	57	10.24	584
18-24	417	5,263	52	26.39	1,372	127	30.56	3,891
25-34	246	8,014	63	27.74	1,740	161	39.00	6,274
35-44	68	8,323	69	30.85	2,140	167	37.12	6,183
45-54	58	5,846	60	20.38	1,224	144	32.01	4,622
55-64	18	--	--	--	--	--	--	--
65 and over	20	--	--	--	--	--	--	--
Males								
14-17	132	1,246	34	15.01	518	66	10.96	729
18-24	323	5,546	59	26.86	1,596	123	32.13	3,950
25-34	190	8,773	69	27.76	1,909	165	41.62	6,864
35-44	60	8,861	77	31.17	2,405	170	37.90	6,456
45-54	38	--	--	--	--	--	--	--
55-64	15	--	--	--	--	--	--	--
65 and over	15	--	--	--	--	--	--	--
Females								
14-17	55	633	22	17.74	395	34	6.92	238
18-24	94	4,289	26	22.78	602	142	25.90	3,688
25-34	56	5,435	42	27.62	1,165	147	29.04	4,270
35-44	8	--	--	--	--	--	--	--
45-54	20	--	--	--	--	--	--	--
55-64	3	--	--	--	--	--	--	--
65 and over	4	--	--	--	--	--	--	--
Household and migrant status:								
Household heads	463	7,907	60	28.89	1,747	161	38.15	6,160
Migratory	20	--	--	--	--	--	--	--
Nonmigratory	443	7,922	60	28.98	1,749	161	38.30	6,173
Other household members	551	3,258	46	22.04	1,016	95	23.64	2,241
Migratory	12	--	--	--	--	--	--	--
Nonmigratory	539	3,235	46	21.83	994	95	23.57	2,242
Years of education completed by workers 25 and over:								
All workers	409	7,480	63	27.23	1,725	154	37.26	5,755
0-4	19	--	--	--	--	--	--	--
5-8	79	6,160	67	26.63	1,772	134	32.72	4,388
9-11	52	6,664	83	25.03	2,089	123	37.06	4,575
12	149	8,115	65	28.36	1,831	171	36.74	6,284
13 and over	110	8,389	50	27.50	1,364	172	40.91	7,025

-- = base was fewer than 50,000 persons.

Appendix table 11--Hired farmworkers who did farmwork and nonfarmwork: Employment characteristics by average number of days worked and earnings, 1981

Characteristics	Thousands of workers	Farm and nonfarm earnings	Farmwork			Nonfarmwork		
			Days worked	Earnings		Days worked	Earnings	
				Daily	Annual		Daily	Annual
	Number	Dollars	Number	----Dollars----		Number	----Dollars----	
All workers	1,014	5,381	53	25.63	1,350	125	32.18	4,031
Primary employment status:								
Farmwork	124	7,295	174	29.69	5,168	69	31.03	2,127
Hired farmwork	105	7,749	197	29.86	5,882	60	31.08	1,867
Without nonfarmwork	0							
With nonfarmwork	1,014	5,381	53	25.63	1,350	125	32.18	4,031
Other farmwork 1/	20	--	--	--	--	--	--	--
Nonfarmwork	420	8,341	38	25.01	949	198	37.33	7,393
Unemployed	46	--	--	--	--	--	--	--
Not in labor force	423	2,132	35	20.19	711	76	18.73	1,421
Keeping house	45	--	--	--	--	--	--	--
Attending school	342	1,932	36	18.98	682	75	16.66	1,250
Other	36	--	--	--	--	--	--	--
Residence, sex, and days of farmwork:								
All workers								
Fewer than 25	526	4,893	9	23.69	211	142	33.04	4,682
25-74	264	4,550	46	25.06	1,145	117	29.10	3,405
75-149	115	6,345	107	23.38	2,493	111	34.60	3,851
150-249	74	8,389	190	29.03	5,509	82	34.99	2,881
250 and over	34	--	--	--	--	--	--	--
Nonfarm residence	910	5,485	50	26.10	1,294	129	32.43	4,191
Fewer than 25	483	4,990	9	23.58	208	144	33.16	4,782
25-74	240	4,637	45	25.47	1,149	118	29.44	3,488
75-149	102	6,652	106	24.08	2,562	117	35.02	4,090
150-249	55	8,878	190	29.22	5,565	93	35.77	3,312
250 and over	28	--	--	--	--	--	--	--
Males								
Fewer than 25	372	5,507	9	25.31	232	149	35.50	5,276
25-74	200	4,797	46	25.17	1,159	120	30.38	3,638
75-149	98	6,811	107	23.36	2,508	121	35.70	4,303
150-249	70	8,294	189	29.28	5,546	79	34.82	2,748
250 and over	33	--	--	--	--	--	--	--
Females								
Fewer than 25	154	3,412	8	19.40	161	125	25.99	3,250
25-74	64	3,780	45	24.72	1,100	109	24.70	2,680
75 and over	22	--	--	--	--	--	--	--
Migratory status and days of farmwork:								
Migratory	32	--	--	--	--	--	--	--
Fewer than 25	11	--	--	--	--	--	--	--
25-74	12	--	--	--	--	--	--	--
75-149	5	--	--	--	--	--	--	--
150 and over	5	--	--	--	--	--	--	--
Nonmigratory	981	5,349	52	25.56	1,334	125	32.15	4,015
Fewer than 25	515	4,869	9	23.81	212	141	32.97	4,657
25-149	363	5,087	64	24.31	1,561	115	30.77	3,526
150-249	71	8,288	191	28.88	5,507	80	34.56	2,781
250 and over	33	--	--	--	--	--	--	--

Zeros appear where estimate was fewer than 500.
-- = base was fewer than 50,000 persons.
1/ Includes operating a farm and unpaid family labor.

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Appendix table 12--Hired farmworkers who did farmwork and nonfarmwork: Regions and racial/ethnic groups by average number of days worked and earnings, 1981

Characteristics	Thousands of workers	Farm and nonfarm earnings	Farmwork			Nonfarmwork		
			Days worked	Earnings		Days worked	Earnings	
				Daily	Annual		Daily	Annual
	Number	Dollars	Number	----Dollars----		Number	----Dollars----	
All workers	1,014	5,381	53	25.63	1,350	125	32.18	4,031
Census regions:								
Northeast	96	4,550	69	21.77	1,511	128	23.76	3,039
Whites	90	4,703	72	21.86	1,569	131	23.94	3,134
Hispanics	2	--	--	--	--	--	--	--
Blacks and others	3	--	--	--	--	--	--	--
North Central	338	5,403	51	26.01	1,320	123	33.10	4,083
Whites	330	5,441	51	25.81	1,318	124	33.13	4,123
Hispanics	5	--	--	--	--	--	--	--
Blacks and others	3	--	--	--	--	--	--	--
South	378	5,331	48	24.22	1,157	130	32.02	4,174
Whites	281	5,544	46	24.49	1,124	137	32.28	4,421
Hispanics	32	--	--	--	--	--	--	--
Blacks and others	64	3,979	51	21.90	1,115	98	29.20	2,864
West	202	5,828	57	29.47	1,682	118	35.23	4,146
Whites	159	5,461	52	29.11	1,506	120	32.94	3,955
Hispanics	29	--	--	--	--	--	--	--
Blacks and others	14	--	--	--	--	--	--	--
Standard Federal Regions:								
I	31	--	--	--	--	--	--	--
Whites	31	--	--	--	--	--	--	--
Hispanics	0							
Blacks and others	0							
II	48	--	--	--	--	--	--	--
Whites	43	--	--	--	--	--	--	--
Hispanics	2	--	--	--	--	--	--	--
Blacks and others	3	--	--	--	--	--	--	--
III	42	--	--	--	--	--	--	--
Whites	38	--	--	--	--	--	--	--
Hispanics	0							
Blacks and others	4	--	--	--	--	--	--	--
IV	211	4,887	44	22.65	990	125	31.20	3,897
Whites	161	5,077	44	22.08	961	132	31.25	4,116
Hispanics	0							
Blacks and others	50	4,271	44	24.47	1,081	103	31.01	3,190
V	196	5,331	55	26.75	1,484	121	31.83	3,847
Whites	193	5,352	56	26.74	1,494	121	31.81	3,858
Hispanics	3	--	--	--	--	--	--	--
Blacks and others	0							
VI	153	6,146	59	27.08	1,601	136	33.44	4,544
Whites	108	6,323	55	28.85	1,600	139	34.04	4,723
Hispanics	34	--	--	--	--	--	--	--
Blacks and others	11	--	--	--	--	--	--	--
VII	128	5,577	44	24.50	1,073	128	35.15	4,504
Whites	123	5,654	44	23.82	1,038	131	35.25	4,616
Hispanics	3	--	--	--	--	--	--	--
Blacks and others	2	--	--	--	--	--	--	--
VIII	48	--	--	--	--	--	--	--
Whites	43	--	--	--	--	--	--	--
Hispanics	2	--	--	--	--	--	--	--
Blacks and others	3	--	--	--	--	--	--	--
IX	81	6,825	65	36.51	2,366	107	41.79	4,459
Whites	47	--	--	--	--	--	--	--
Hispanics	24	--	--	--	--	--	--	--
Blacks and others	10	--	--	--	--	--	--	--
X	76	4,389	51	20.75	1,052	119	28.09	3,337
Whites	74	4,354	51	20.83	1,061	120	27.53	3,293
Hispanics	1	--	--	--	--	--	--	--
Blacks and others	1	--	--	--	--	--	--	--

Zeros appear where estimate was fewer than 500.
-- = base was fewer than 50,000 persons.

Appendix table 13--All hired farmworkers: Percentage distribution of daily farm earnings by selected characteristics and regions, 1981

Characteristics	Thousands of workers	Daily farm earnings								Median earnings
		Fewer than $8.00	$8.00 to $10.00	$11.00 to $13.99	$14.00 to $16.99	$17.00 to $19.99	$20.00 to $22.99	$23.00 to $25.99	$26.00 and over	
	Number	Percent								Dollars
All workers	2,492	8	10	5	8	4	12	11	42	23.83
Ethnic groups and sex:										
Whites	1,824	9	10	6	10	4	12	10	39	21.79
Hispanics	328	3	7	2	1	7	8	11	61	29.46
Blacks and others	340	6	13	6	9	2	11	15	39	23.92
Males	1,918	8	9	5	8	4	11	9	45	24.64
Whites	1,434	10	9	5	9	4	11	9	42	23.31
Hispanics	237	3	3	2	0	6	7	10	68	30.30
Blacks and others	247	6	14	7	8	1	11	12	41	24.19
Females	574	5	14	7	9	6	15	14	31	20.44
Whites	390	6	14	8	10	6	16	13	28	20.21
Hispanics	90	1	18	3	2	10	10	12	44	24.68
Blacks and others	93	4	11	5	11	2	11	21	33	23.57
Primary employment status:										
Farmwork	796	6	6	3	4	3	10	10	58	28.02
Hired farmwork	706	6	6	3	4	2	9	10	60	28.40
Without nonfarmwork	601	7	6	4	4	2	8	10	59	28.45
With nonfarmwork	105	4	9	0	5	3	11	7	61	28.11
Other farmwork 1/	90	8	5	4	4	5	23	7	44	23.52
Nonfarmwork	420	5	12	4	7	5	14	12	41	23.77
Unemployed	86	4	7	4	12	4	14	7	48	25.33
Not in labor force	1,189	10	13	7	11	5	12	11	31	20.15
Keeping house	199	4	13	8	6	9	12	13	34	20.89
Attending school	858	12	14	7	13	4	11	11	27	19.50
Other	132	2	9	3	9	4	12	8	53	26.66
Age (years):										
14-17	605	13	15	7	15	5	11	12	22	17.03
18-24	760	7	8	5	8	4	13	8	46	24.83
25-34	498	4	9	3	5	4	12	11	54	27.48
35-44	236	4	13	4	6	4	10	7	52	27.30
45-54	180	9	10	5	3	6	9	16	41	24.49
55-64	104	5	7	4	4	1	14	19	46	25.44
65 and over	108	7	9	14	5	0	11	10	43	24.76
Days of farmwork:										
Fewer than 25	969	9	14	7	12	5	14	11	29	20.09
25-74	538	5	9	6	9	5	12	11	43	24.27
75-149	310	7	12	3	5	4	12	14	44	25.02
150-249	281	6	7	4	4	3	6	9	61	29.57
250 and over	394	10	6	4	5	3	8	9	56	27.48
Household and migrant status:										
Household heads	1,046	6	8	4	5	3	12	10	54	27.55
Migratory	44	--	--	--	--	--	--	--	--	--
Nonmigratory	1,003	6	8	3	5	3	11	10	54	27.67
Other household members	1,446	9	12	6	11	6	12	11	34	20.40
Migratory	72	15	9	7	7	5	7	13	38	23.14
Nonmigratory	1,374	8	12	6	11	6	12	11	33	20.38
Census regions:										
Northeast	204	14	9	6	10	7	12	7	35	20.13
Whites	190	16	10	6	11	5	10	7	35	20.08
Hispanics	6	--	--	--	--	--	--	--	--	--
Blacks and others	8	--	--	--	--	--	--	--	--	--
North Central	688	6	12	5	9	5	11	13	40	23.68
Whites	672	6	12	6	9	5	11	13	39	23.36
Hispanics	8	--	--	--	--	--	--	--	--	--
Blacks and others	8	--	--	--	--	--	--	--	--	--
South	1,004	8	12	6	11	5	14	11	33	20.76
Whites	627	10	10	6	12	5	15	10	32	20.32
Hispanics	113	1	17	2	0	13	15	11	41	22.87
Blacks and others	265	6	16	6	11	2	11	15	32	21.97
West	595	6	6	4	3	2	8	8	62	29.90
Whites	335	8	8	5	5	3	12	5	54	27.52
Hispanics	201	4	2	3	1	2	4	11	73	32.68
Blacks and others	59	6	6	10	1	0	1	13	64	30.10

Continued--

Appendix table 13--All hired farmworkers: Percentage distribution of daily farm earnings by selected characteristics and regions, 1981--continued

Characteristics	Thousands of workers	Daily farm earnings								Median earnings
		Fewer than $8.00	$8.00 to $10.00	$11.00 to $13.99	$14.00 to $16.99	$17.00 to $19.99	$20.00 to $22.99	$23.00 to $25.99	$26.00 and over	
	Number	Percent								Dollars
Standard Federal Regions:										
I	60	14	8	4	13	8	8	11	34	20.25
Whites	60	14	8	4	13	8	8	11	34	20.25
Hispanics	0									
Blacks and others	0									
II	101	9	12	6	10	9	15	3	36	20.12
Whites	87	10	14	7	11	5	10	4	37	20.03
Hispanics	6	--	--	--	--	--	--	--	--	--
Blacks and others	8	--	--	--	--	--	--	--	--	--
III	119	20	6	10	19	2	11	6	27	16.09
Whites	106	21	4	11	18	2	9	5	30	16.19
Hispanics	0									
Blacks and others	13	--	--	--	--	--	--	--	--	--
IV	567	9	12	6	11	5	14	12	32	20.42
Whites	347	11	10	5	12	6	15	10	31	20.26
Hispanics	18	--	--	--	--	--	--	--	--	--
Blacks and others	201	5	16	7	11	2	10	16	33	21.89
V	380	8	14	7	11	3	7	15	35	21.58
Whites	377	8	15	7	11	3	7	15	34	21.07
Hispanics	3	--	--	--	--	--	--	--	--	--
Blacks and others	0									
VI	384	5	14	4	6	5	14	11	39	22.73
Whites	229	6	11	6	9	3	16	11	37	21.63
Hispanics	102	2	19	1	0	13	11	12	43	24.34
Blacks and others	53	9	17	5	6	2	11	13	37	22.75
VII	269	4	8	3	8	7	15	11	44	24.58
Whites	258	4	9	3	8	7	16	10	43	24.10
Hispanics	6	--	--	--	--	--	--	--	--	--
Blacks and others	6	--	--	--	--	--	--	--	--	--
VIII	107	8	10	5	8	3	11	9	47	24.80
Whites	98	7	11	5	8	3	12	7	47	24.54
Hispanics	5	--	--	--	--	--	--	--	--	--
Blacks and others	4	--	--	--	--	--	--	--	--	--
IX	334	4	3	4	1	1	8	6	74	33.47
Whites	115	5	3	5	0	1	15	2	68	34.35
Hispanics	165	2	2	2	1	2	5	5	80	35.64
Blacks and others	54	6	5	9	0	0	1	14	66	31.03
X	172	11	10	4	5	3	9	13	45	25.02
Whites	148	11	10	4	6	3	10	6	48	24.94
Hispanics	23	--	--	--	--	--	--	--	--	--
Blacks and others	2	--	--	--	--	--	--	--	--	--

Zeros appear where the estimate was fewer than 500.
-- = base was fewer than 50,000 persons.
1/ Includes operating a farm and unpaid family labor.

Appendix table 14--All hired farmworkers: Percentage distribution of total annual earnings by selected characteristics and regions, 1981

Characteristics	Thousands of workers	Total annual earnings								Median earnings
		Fewer than $500	$500 to $999	$1,000 to $2,499	$2,500 to $3,999	$4,000 to $5,499	$5,500 to $7,499	$7,500 to $9,999	$10,000 and over	
	Number	Percent								Dollars
All workers	2,492	22	10	18	11	7	10	9	13	2,484
Ethnic groups and sex:										
Whites	1,824	23	11	18	11	7	9	8	14	2,315
Hispanics	328	13	4	16	18	6	12	15	15	3,914
Blacks and others	340	24	12	23	10	5	11	11	5	1,656
Males	1,918	18	9	18	11	7	10	11	15	3,053
Whites	1,434	20	10	18	10	7	9	9	16	2,682
Hispanics	237	6	4	13	17	6	15	19	20	6,288
Blacks and others	247	17	14	20	12	6	13	13	6	2,512
Females	574	34	12	20	11	7	6	4	5	1,197
Whites	390	32	14	18	11	8	7	4	6	1,266
Hispanics	90	34	4	24	20	6	6	5	3	1,246
Blacks and others	93	43	9	29	4	2	5	5	2	789
Primary employment status:										
Farmwork	796	6	3	11	12	9	18	19	21	6,504
Hired farmwork	706	1	2	11	13	10	20	22	22	7,138
Without nonfarmwork	601	1	3	11	13	9	20	21	23	7,079
With nonfarmwork	105	0	0	10	12	14	17	28	20	7,415
Other farmwork 1/	90	46	8	16	8	5	8	1	9	742
Nonfarmwork	420	0	2	8	16	10	16	14	34	7,325
Unemployed	86	20	16	27	15	7	10	0	4	1,795
Not in labor force	1,189	40	17	26	9	4	1	1	0	726
Keeping house	199	41	14	30	11	4	0	0	0	839
Attending school	858	42	18	25	8	4	2	1	0	679
Other	132	29	17	29	14	5	1	2	3	1,159
Age (years):										
14-17	605	50	19	21	6	2	1	0	0	499
18-24	760	12	9	23	16	9	9	10	12	3,172
25-34	498	9	4	13	11	7	14	17	25	6,330
35-44	236	12	5	13	11	8	16	13	23	6,058
45-54	180	12	5	17	15	10	13	9	20	4,079
55-64	104	17	5	14	9	8	27	12	7	4,904
65 and over	108	34	14	17	10	9	5	9	2	1,195
Days of farmwork:										
Fewer than 25	969	50	11	10	7	5	4	3	10	498
25-74	538	10	20	39	12	4	4	3	7	1,532
75-149	310	0	8	27	31	13	9	7	5	3,111
150-249	281	0	1	12	11	16	27	20	13	6,331
250 and over	394	0	1	9	7	5	19	26	33	8,267
Household and migrant status:										
Household heads	1,046	9	6	11	12	6	14	15	26	6,383
Migratory	44	--	--	--	--	--	--	--	--	--
Nonmigratory	1,003	9	6	12	12	6	14	15	27	6,418
Other household members	1,446	31	13	23	11	8	6	5	3	1,232
Migratory	72	22	23	20	8	11	13	0	3	1,299
Nonmigratory	1,374	32	13	24	11	7	6	5	3	1,228
Census regions:										
Northeast	204	19	11	22	10	7	9	9	14	2,453
Whites	190	20	9	22	10	6	9	10	14	2,472
Hispanics	6	--	--	--	--	--	--	--	--	--
Blacks and others	8	--	--	--	--	--	--	--	--	--
North Central	688	28	12	16	9	8	7	7	13	2,030
Whites	672	28	12	16	9	8	7	7	13	2,013
Hispanics	8	--	--	--	--	--	--	--	--	--
Blacks and others	8	--	--	--	--	--	--	--	--	--
South	1,004	24	10	19	11	7	12	10	8	2,215
Whites	627	23	9	20	10	8	11	8	11	2,246
Hispanics	113	26	2	10	15	5	16	23	3	3,574
Blacks and others	265	24	14	22	11	6	11	9	3	1,563
West	595	13	8	19	15	5	9	11	20	3,522
Whites	335	15	12	16	15	6	8	8	20	3,367
Hispanics	201	7	4	20	19	6	10	12	23	4,225
Blacks and others	59	22	4	29	3	1	9	20	13	2,440

Continued--

Appendix table 14--All hired farmworkers: Percentage distribution of total annual earnings by selected characteristics and regions, 1981--continued

Characteristics	Thousands of workers	Total annual earnings								Median earnings
		Fewer than $500	$500 to $999	$1,000 to $2,499	$2,500 to $3,999	$4,000 to $5,499	$5,500 to $7,499	$7,500 to $9,999	$10,000 and over	
	Number	Percent								Dollars
Standard Federal Regions:										
I	60	17	8	24	18	4	5	6	18	2,621
Whites	60	17	8	24	18	4	5	6	18	2,621
Hispanics	0									
Blacks and others	0									
II	101	18	15	21	6	6	11	10	13	2,299
Whites	87	21	11	21	5	6	13	11	12	2,356
Hispanics	6	--	--	--	--	--	--	--	--	--
Blacks and others	8	--	--	--	--	--	--	--	--	--
III	119	24	4	24	13	5	11	11	7	2,220
Whites	106	23	5	21	12	6	13	12	8	2,527
Hispanics	0									
Blacks and others	13	--	--	--	--	--	--	--	--	--
IV	567	23	12	20	13	7	12	6	7	1,928
Whites	347	23	11	21	10	8	13	5	10	2,083
Hispanics	18	--	--	--	--	--	--	--	--	--
Blacks and others	201	25	15	19	12	7	11	8	3	1,522
V	380	30	11	17	7	8	8	7	13	1,808
Whites	377	30	12	17	7	8	8	7	13	1,808
Hispanics	3	--	--	--	--	--	--	--	--	--
Blacks and others	0									
VI	384	24	8	16	8	7	10	16	11	3,014
Whites	299	22	9	17	9	9	7	12	15	3,225
Hispanics	102	29	2	10	7	6	16	23	7	4,426
Blacks and others	53	24	12	23	5	5	14	16	1	1,625
VII	269	26	12	13	12	9	6	7	14	2,246
Whites	258	26	13	14	11	9	6	8	15	2,158
Hispanics	6	--	--	--	--	--	--	--	--	--
Blacks and others	6	--	--	--	--	--	--	--	--	--
VIII	107	17	7	18	18	6	10	8	15	3,363
Whites	98	18	7	19	17	6	11	9	14	3,332
Hispanics	5	--	--	--	--	--	--	--	--	--
Blacks and others	4	--	--	--	--	--	--	--	--	--
IX	334	10	6	20	12	5	10	14	23	4,941
Whites	115	10	10	14	16	5	9	9	28	4,926
Hispanics	165	6	5	20	13	7	11	14	25	5,366
Blacks and others	54	22	3	32	0	1	10	22	10	2,217
X	172	18	14	19	19	5	7	6	12	2,410
Whites	148	18	16	19	13	6	7	7	13	2,029
Hispanics	23	--	--	--	--	--	--	--	--	--
Blacks and others	2	--	--	--	--	--	--	--	--	--

Zeros appear where estimate was fewer than 500.
-- = base was fewer than 50,000 persons.
1/ Includes operating a farm and unpaid family labor.

Appendix table 15--All hired farmworkers: Percentage distribution of annual farm earnings by selected characteristics and regions, 1981

Characteristics	Thousands of workers	Annual farm earnings								Median earnings
		Fewer than $500	$500 to $999	$1,000 to $2,499	$2,500 to $3,999	$4,000 to $5,499	$5,500 to $7,499	$7,500 to $9,999	$10,000 and over	
	Number	Percent								Dollars
All workers	2,492	39	12	17	7	5	6	6	6	923
Ethnic groups and sex:										
Whites	1,824	44	12	17	6	5	5	4	6	694
Hispanics	328	18	10	15	16	5	10	11	12	2,872
Blacks and others	340	33	15	19	5	4	10	9	3	1,117
Males	1,918	34	12	17	8	5	7	7	8	1,206
Whites	1,434	39	12	18	7	5	6	5	7	933
Hispanics	237	12	11	11	16	6	12	14	15	3,581
Blacks and others	247	26	16	17	7	5	12	12	3	1,568
Females	574	55	12	17	6	3	4	2	1	397
Whites	390	60	13	14	4	3	3	1	1	342
Hispanics	90	35	9	24	16	4	6	3	3	1,177
Blacks and others	93	51	12	26	1	1	5	3	2	347
Primary employment status:										
Farmwork	796	7	4	12	12	10	18	18	19	6,106
Hired farmwork	706	1	3	12	12	10	20	20	21	6,654
Without nonfarmwork	601	1	3	11	13	9	20	21	23	7,079
With nonfarmwork	105	0	4	20	10	18	20	14	12	5,172
Other farmwork 1/	90	55	8	15	8	4	4	1	5	415
Nonfarmwork	420	56	15	17	5	4	1	0	0	397
Unemployed	86	43	18	22	9	4	5	0	0	676
Not in labor force	1,189	54	17	19	5	2	1	0	0	426
Keeping house	199	50	17	25	6	1	0	0	0	512
Attending school	858	57	18	18	4	2	1	0	0	408
Other	132	43	13	22	13	4	1	0	0	718
Age (years):										
14-17	605	60	17	15	5	2	0	0	0	363
18-24	706	37	13	22	8	5	5	5	6	1,008
25-34	498	31	8	17	8	6	10	11	9	1,823
35-44	236	23	12	12	11	6	13	9	15	3,096
45-54	180	26	13	16	8	8	8	8	13	1,674
55-64	104	23	7	11	6	8	26	10	6	3,895
65 and over	108	44	11	15	9	6	2	6	1	606
Days of farmwork:										
Fewer than 25	969	91	8	1	0	0	0	0	0	140
25-74	538	16	34	46	3	0	0	0	0	1,000
75-149	310	1	13	30	35	14	3	0	0	2,536
150-249	281	0	1	13	12	19	28	15	10	5,643
250 and over	394	0	1	9	7	6	19	26	32	8,116
Household and migrant status:										
Household heads	1,046	28	10	13	9	5	10	10	13	2,059
Migratory	44	--	--	--	--	--	--	--	--	--
Nonmigratory	1,003	29	10	13	9	5	10	10	13	2,059
Other household members	1,446	47	14	20	7	5	4	3	2	558
Migratory	72	26	20	19	8	12	14	0	0	1,144
Nonmigratory	1,374	48	14	20	7	4	3	3	2	527
Census regions:										
Northeast	204	34	14	21	6	3	4	7	10	1,104
Whites	190	35	13	21	7	2	4	8	10	1,143
Hispanics	6	--	--	--	--	--	--	--	--	--
Blacks and others	8	--	--	--	--	--	--	--	--	--
North Central	688	49	12	14	6	5	5	3	4	508
Whites	672	49	12	14	6	5	4	3	5	505
Hispanics	8	--	--	--	--	--	--	--	--	--
Blacks and others	8	--	--	--	--	--	--	--	--	--
South	1,004	40	14	18	6	5	8	5	2	796
Whites	627	44	14	19	5	6	6	3	3	689
Hispanics	113	35	9	10	13	5	11	11	3	1,882
Blacks and others	265	34	16	19	7	5	10	8	1	1,035
West	595	27	10	17	11	4	7	9	13	2,026
Whites	335	37	11	16	8	4	5	6	11	1,149
Hispanics	201	9	8	19	18	5	10	12	17	3,256
Blacks and others	59	24	14	18	2	1	9	20	9	1,620

Continued--

Appendix table 15--All hired farmworkers: Percentage distribution of annual farm earnings by selected characteristics and regions, 1981--continued

Characteristics	Thousands of workers	Annual farm earnings								Median earnings
		Fewer than $500	$500 to $999	$1,000 to $2,499	$2,500 to $3,999	$4,000 to $5,499	$5,500 to $7,499	$7,500 to $9,999	$10,000 and over	
	Number	Percent								Dollars
Standard Federal Regions:										
I	60	35	11	26	10	4	3	6	4	1,228
Whites	60	35	11	26	10	4	3	6	4	1,228
Hispanics	0									
Blacks and others	0									
II	101	30	19	18	4	4	6	8	13	1,173
Whites	87	31	17	18	4	2	7	9	12	1,179
Hispanics	6	--	--	--	--	--	--	--	--	--
Blacks and others	8	--	--	--	--	--	--	--	--	--
III	119	44	9	21	9	1	5	6	5	720
Whites	106	43	10	19	9	1	5	7	5	715
Hispanics	0									
Blacks and others	13	--	--	--	--	--	--	--	--	--
IV	567	40	16	18	7	5	7	4	2	786
Whites	347	46	16	18	4	6	6	2	2	567
Hispanics	18	--	--	--	--	--	--	--	--	--
Blacks and others	201	35	16	19	7	5	10	7	1	918
V	380	49	12	17	6	3	5	2	5	502
Whites	377	50	11	17	6	3	5	2	5	498
Hispanics	3	--	--	--	--	--	--	--	--	--
Blacks and others	0									
VI	384	38	12	16	5	6	8	8	5	957
Whites	229	40	11	19	6	6	6	6	6	915
Hispanics	102	40	10	9	5	6	10	12	6	1,033
Blacks and others	53	28	18	14	5	5	13	13	0	1,075
VII	269	51	12	10	6	7	4	4	4	494
Whites	258	52	13	10	6	7	4	4	4	491
Hispanics	6	--	--	--	--	--	--	--	--	--
Blacks and others	6	--	--	--	--	--	--	--	--	--
VIII	107	37	13	16	9	5	7	6	6	1,047
Whites	98	36	12	17	8	6	7	7	5	1,157
Hispanics	5	--	--	--	--	--	--	--	--	--
Blacks and others	4	--	--	--	--	--	--	--	--	--
IX	334	18	9	16	11	5	8	13	18	3,014
Whites	115	31	8	11	11	6	3	8	20	2,279
Hispanics	165	7	9	19	14	6	11	13	18	3,885
Blacks and others	54	22	11	19	1	1	10	22	9	2,217
X	172	39	12	19	12	3	6	3	6	991
Whites	148	43	13	19	7	4	6	4	6	876
Hispanics	23	--	--	--	--	--	--	--	--	--
Blacks and others	2	--	--	--	--	--	--	--	--	--

Zeros appear where estimate was fewer than 500.
-- = base was fewer than 50,000 persons.
1/ Includes operating a farm and unpaid family labor.

Appendix table 16--Hired farmworkers who did farmwork and nonfarmwork: Percentage distribution of annual nonfarm earnings by selected characteristics and regions, 1981

Characteristics	Thousands of workers	Annual nonfarm earnings: Fewer than $500	$500 to $999	$1,000 to $2,499	$2,500 to $3,999	$4,000 to $5,499	$5,500 to $7,499	$7,500 to $9,999	$10,000 and over	Median earnings
	Number	Percent								Dollars
All workers	1,014	26	10	17	13	7	7	5	15	2,128
Ethnic groups and sex:										
Whites	861	25	9	18	13	8	7	4	15	2,212
Hispanics	69	0	16	16	9	12	3	15	14	3,754
Blacks and others	84	34	16	20	11	4	7	1	8	1,173
Males	773	23	11	17	14	6	8	5	17	2,353
Whites	652	23	10	18	14	6	8	4	17	2,363
Hispanics	60	16	18	4	10	3	18	13	18	4,044
Blacks and others	61	33	17	14	15	3	7	1	11	957
Females	241	33	8	19	11	13	4	5	7	1,353
Whites	208	33	7	17	12	14	5	5	8	1,376
Hispanics	9	--	--	--	--	--	--	--	--	--
Blacks and others	23	--	--	--	--	--	--	--	--	--
Primary employment status:										
Farmwork	124	29	16	22	23	3	1	0	5	1,296
Hired farmwork	105	33	17	20	24	3	2	0	2	1,084
Without nonfarmwork	0									
With nonfarmwork	105	33	17	20	24	3	2	0	2	1,084
Other farmwork 1/	20	--	--	--	--	--	--	--	--	--
Nonfarmwork	420	3	4	11	15	12	13	11	32	6,313
Unemployed	46	--	--	--	--	--	--	--	--	--
Not in labor force	423	47	14	20	10	4	4	0	1	567
Keeping house	45	--	--	--	--	--	--	--	--	--
Attending school	342	50	14	19	9	4	4	1	0	494
Other	36	--	--	--	--	--	--	--	--	--
Age (years):										
14-17	188	72	11	14	1	2	1	0	0	253
18-24	417	17	13	22	16	8	9	5	11	2,277
25-34	246	14	6	14	14	8	9	6	30	4,036
35-44	68	11	5	10	13	8	12	19	21	5,905
45-54	58	7	9	18	26	12	6	1	20	3,024
55-64	18	--	--	--	--	--	--	--	--	--
65 and over	20	--	--	--	--	--	--	--	--	--
Days of farmwork:										
Fewer than 25	526	24	10	14	11	10	7	5	19	2,524
25-74	264	27	9	22	13	4	7	6	12	1,703
75-149	115	19	12	19	16	7	15	3	10	2,704
150-249	74	31	13	17	19	4	7	3	7	1,811
250 and over	34	--	--	--	--	--	--	--	--	--
Household and migrant status:										
Household heads	463	11	10	14	13	6	9	9	27	4,049
Migratory	20	--	--	--	--	--	--	--	--	--
Nonmigratory	443	11	10	14	13	6	9	9	27	4,039
Other household members	551	38	10	20	13	8	6	2	4	1,125
Migratory	12	--	--	--	--	--	--	--	--	--
Nonmigratory	539	37	11	20	13	8	6	1	4	1,162
Census regions:										
Northeast	96	28	6	20	18	12	8	1	7	2,158
Whites	90	26	6	21	17	12	8	2	8	2,187
Hispanics	2	--	--	--	--	--	--	--	--	--
Blacks and others	3	--	--	--	--	--	--	--	--	--
North Central	338	28	11	17	11	7	6	4	16	1,950
Whites	330	28	11	17	11	7	6	4	16	1,981
Hispanics	5	--	--	--	--	--	--	--	--	--
Blacks and others	3	--	--	--	--	--	--	--	--	--
South	378	23	9	17	11	9	10	7	13	2,441
Whites	281	22	7	18	12	10	8	7	16	2,584
Hispanics	32	--	--	--	--	--	--	--	--	--
Blacks and others	64	29	19	19	11	6	9	0	7	1,215
West	202	25	13	15	17	3	5	2	19	1,535
Whites	159	25	12	17	19	3	6	2	16	1,821
Hispanics	29	--	--	--	--	--	--	--	--	--
Blacks and others	14	--	--	--	--	--	--	--	--	--

Continued--

Appendix table 16--Hired farmworkers who did farmwork and nonfarmwork: Percentage distribution of annual nonfarm earnings by selected characteristics and regions, 1981--continued

Characteristics	Thousands of workers	Annual nonfarm earnings: Fewer than $500	$500 to $999	$1,000 to $2,499	$2,500 to $3,999	$4,000 to $5,499	$5,500 to $7,499	$7,500 to $9,999	$10,000 and over	Median earnings
	Number	Percent								Dollars
Standard Federal Regions:										
I	31	--	--	--	--	--	--	--	--	--
Whites	31	--	--	--	--	--	--	--	--	--
Hispanics	0									
Blacks and others	0									
II	48	--	--	--	--	--	--	--	--	--
Whites	43	--	--	--	--	--	--	--	--	--
Hispanics	2	--	--	--	--	--	--	--	--	--
Blacks and others	3	--	--	--	--	--	--	--	--	--
III	42	--	--	--	--	--	--	--	--	--
Whites	38	--	--	--	--	--	--	--	--	--
Hispanics	0									
Blacks and others	4	--	--	--	--	--	--	--	--	--
IV	211	23	8	22	12	11	7	2	15	2,098
Whites	161	21	6	23	12	12	7	3	16	2,462
Hispanics	0									
Blacks and others	50	27	16	20	13	7	7	0	9	1,400
V	196	29	12	15	13	6	7	5	14	1,999
Whites	193	28	12	15	14	6	7	5	14	1,999
Hispanics	3	--	--	--	--	--	--	--	--	--
Blacks and others	0									
VI	153	27	8	10	12	8	11	11	12	2,968
Whites	108	29	6	9	15	10	5	9	17	2,910
Hispanics	34	--	--	--	--	--	--	--	--	--
Blacks and others	11	--	--	--	--	--	--	--	--	--
VII	128	26	9	21	8	9	4	3	20	1,567
Whites	123	27	8	20	8	9	4	4	21	1,587
Hispanics	3	--	--	--	--	--	--	--	--	--
Blacks and others	2	--	--	--	--	--	--	--	--	--
VIII	48	22	11	13	20	2	8	4	19	--
Whites	43	22	12	15	18	3	9	3	18	--
Hispanics	2	--	--	--	--	--	--	--	--	--
Blacks and others	3	--	--	--	--	--	--	--	--	--
IX	81	19	22	14	12	2	6	2	23	1,340
Whites	47	--	--	--	--	--	--	--	--	--
Hispanics	24	--	--	--	--	--	--	--	--	--
Blacks and others	10	--	--	--	--	--	--	--	--	--
X	76	32	7	20	20	3	3	3	14	1,531
Whites	74	33	7	20	18	3	3	3	13	1,434
Hispanics	1	--	--	--	--	--	--	--	--	--
Blacks and others	1	--	--	--	--	--	--	--	--	--

Zeros appear where base was fewer than 500.
-- = base was fewer than 50,000 persons.
1/ Includes operating a farm and unpaid family labor.

Appendix table 17--Hired farmworker estimates: A comparison using 1970 and 1980 census weights, 1981

Characteristics	Census base weights				Difference, 1980 minus 1970
	1970		1980		
	Number	Distribution	Number	Distribution	
	Thousands	Percent	Thousands	Percent	Thousands
All workers 1/	2,423	100	2,492	100	69
Racial/ethnic groups:					
Whites	1,794	74	1,824	73	30
Hispanics	312	13	328	13	16
Blacks and others	317	13	340	14	23
Primary employment status:					
Farmwork	768	32	796	32	28
Hired farmwork	680	28	706	28	26
Without farmwork	578	24	601	24	23
With farmwork	101	4	105	4	4
Other farmwork 2/	89	4	90	4	1
Nonfarmwork	410	17	420	17	10
Unemployed	83	3	86	3	3
Not in the labor force	1,161	48	1,189	48	28
Keeping house	192	8	199	8	7
Attending school	840	35	858	34	18
Other	128	5	132	5	4
Age (years):					
14-17	594	25	605	24	11
18-24	737	30	760	31	23
25-34	476	20	498	20	22
35-44	231	10	236	9	5
45-54	178	7	180	7	2
55-64	101	4	104	4	3
65 and over	105	4	108	4	3
Migratory status:					
Migratory	112	5	115	5	3
Nonmigratory	2,311	95	2,377	95	66
Census Region:					
Northeast	205	8	204	8	-1
North Central	692	29	688	28	-4
South	963	40	1,004	40	41
West	562	23	595	24	33

Continued--

Appendix table 17--Hired farmworker estimates: A comparison using 1970 and 1980 census weights, 1981--continued

Characteristics	Census base weights				Difference, 1980 minus 1970
	1970		1980		
	Number	Distribution	Number	Distribution	
	Thousands	Percent	Thousands	Percent	Thousands
Days of farmwork:					
Fewer than 25	949	39	969	39	20
25-74	520	21	538	22	18
75-149	303	13	310	12	7
150-249	270	11	281	11	11
250 and over	380	16	394	16	14

1/ Numbers and percentages may not add to totals due to rounding.
2/ Includes operating a farm and unpaid family labor.

APPENDIX II: SOURCE AND RELIABILITY OF ESTIMATES

Estimates in this report are based on data obtained in December 1981 from supplementary questions in the CPS of the Bureau of the Census.

Sampling Procedures and Questionnaire Design

The CPS sample was initially selected from 1970 census files and is updated periodically to reflect new home construction. This sample includes 620 areas comprising 1,113 counties and independent cities in each State and the District of Columbia, but excludes Puerto Rico and other U.S. territories and possessions. Trained interviewers collected the information from approximately 58,000 U.S. households.[6] The supplementary questions on the December survey were asked of persons 14 years of age or older who performed farmwork for wages or salary during 1981. Questions concerned the number of days of farmwork for wage or salary, migratory status, hired nonfarmwork and wages, principal employment status in 1981, residence, and other matters. Persons performing hired farmwork during 1981 but who died, entered the armed forces, or were no longer in the civilian noninstitutional population for other reasons were not included. Also, foreign nationals who did hired farmwork in this country and returned to their homes before the field collection were not included.

The estimating procedure used for the CPS data involves the expansion of the sample results to independent estimates of the U.S. civilian noninstitutional population by age, race, and sex. These independent estimates are based on statistics from the 1980 Census of Population; statistics on births, deaths, immigration, and emigration; and statistics on the number of people in the armed forces.

Reliability of the Estimates

Since the CPS estimates in this report are based on a sample, they may differ somewhat from the figures that would have been obtained from a complete census even if it had been taken using the same schedules, instructions, and enumerators. There are two types of errors possible in an estimate based on a sample survey--sampling and nonsampling. Sampling standard errors are provided for data in this report, but the extent of nonsampling error is unknown. Consequently, particular care should be exercised in the interpretation of figures based on a relatively small number of cases or on small differences among estimates.

Nonsampling Variability

As in any survey work, results are subject to errors of response and nonreporting in addition to sampling variability. Nonsampling errors can be attributed to many sources. A partial list would include inability to obtain information about all cases in the sample, definitional difficulties, differences in the interpretation of questions, respondents' inability or

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[6] For a detailed explanation of CPS sampling procedures, see The Current Population Survey--A Report on Methodology, U.S. Bureau of the Census, Paper 7, U.S. Govt. Print. Off., 1963.

unwillingness to provide correct information, inability of respondents to recall information, mistakes made in recording or coding the data, mistakes made in processing data, mistakes made in estimating values of missing data, and failure to represent all units in the sample.

Undercoverage in the CPS results from missed housing units and missed persons within sampled households. Overall undercoverage, as compared to the level of the 1980 decennial census, is about 7 percent. CPS undercoverage varies with age, sex, and race. Generally, undercoverage is larger for males than females and for blacks and other races than for whites. Ratio estimation to independent age-sex-race population controls partially corrects for the bias due to survey undercoverage. However, biases exist in the estimates to the extent that missed persons in missed households or missed persons in interviewed households have different characteristics than interviewed persons in the same age-sex-race group. Further, the independent population controls used have not been adjusted for undercoverage in the 1980 census.

Sampling Variability

Since the size of most nonsampling errors is unknown, the reliability of an estimate is described only in terms of standard errors. These are primarily measures of sampling variability; that is, the variations that might occur by chance because a sample, rather than the whole of the population, is surveyed. As calculated for this report, the standard error also partially measures the effect of certain response and enumeration errors, but it does not measure any systematic biases in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census figure by less than the standard error. The chances are about 90 out of 100 that this difference would be less than 1.6 times the standard error, and the chances are about 95 out of 100 that the difference would be less than twice the standard error.

Comparability with Other Data

Data obtained from the CPS are not entirely comparable with data obtained from other governmental sources. This is due in large part to differences in survey processes. Therefore, caution should be used when comparing data in this report with data from other sources.

Standard Error Tables and Their Use

The figures presented in appendix tables 18 through 22 provide approximations of standard errors of various estimates shown in this report for data on total, white, and black and other hired farmworkers. To obtain standard errors for workers of Hispanic origin, multiply the standard errors in appendix tables 18 through 22 by 1.4.

Standard errors for values not shown in the standard errors tables may be approximated by interpolation. To derive standard errors that would be applicable to a wide variety of items and could be prepared at a moderate cost, a number of approximations were required. As a result, the tables of standard

errors (along with the factor for persons of Hispanic origin) provide an indication of the size of the standard errors rather than the precise standard error for any specific item.

Standard Errors of Estimated Numbers

Appendix table 18 shows standard errors, σ_x, for estimated numbers of hired farmworkers. Linear interpolation may be used to obtain standard errors for intermediate values not shown in the tables.

Alternately, standard errors can be calculated using the following formula (1), which was used to compute the tabular standard errors. Direct computation will give more accurate results than linear interpolation.

$$\sigma_x = c\sqrt{ax^2 + bx} \quad , \qquad (1)$$

where x is the actual size of the estimate (not rounded to thousands); a is 0.000382; b is 3,796; and c is 1.0 for total, white, or black and other persons, and 1.4 for persons of Hispanic origin. Formula (1) is used to calculate standard errors for estimated numbers of hired farmworkers only.

Standard Errors of Estimated Percentages

Appendix table 19 shows standard errors of estimated percentages of hired farmworkers. The reliability of an estimated percentage, computed by using sample data for both numerator and the denominator, depends on both the size of the percentage and the size of the total on which the percentage was based. Estimated percentages are relatively more reliable than the

Appendix table 18--Standard errors for estimated numbers of hired farmworkers 1/

(68 chances out of 100)

Size of estimates	Standard error
Thousands	
10	6
25	10
50	14
100	20
250	31
500	45
1,000	65
2,500	109
3,000	122

1/ To obtain approximate standard errors for persons of Hispanic origin, multiply the above standard errors by 1.4.

Appendix table 19--Standard errors of percentages of hired farmworkers 1/

(68 chances out of 100)

Estimated percentage	Base of percentage in thousands							
	25	50	100	250	500	1,000	2,500	3,000
	Percent							
1 or 99	3.9	2.7	1.9	1.2	0.9	0.6	0.4	0.4
2 or 98	5.5	3.9	2.7	1.7	1.2	.9	.5	.5
5 or 95	8.5	6.0	4.2	2.7	1.9	1.3	.8	.8
10 or 90	11.7	8.3	5.8	3.7	2.6	1.8	1.2	1.1
15 or 85	13.9	9.8	7.0	4.4	3.1	2.2	1.4	1.3
25 or 75	16.9	11.9	8.4	5.3	3.8	2.7	1.7	1.5
50	19.5	13.8	9.7	6.2	4.4	3.1	1.9	1.8

1/ To obtain approximate standard errors for persons of Hispanic origin, multiply the above standard errors by 1.4.

corresponding estimates of the numerators of the percentages, particularly if the percentages are 50 percent or more. Linear interpolation may be used to obtain standard errors for intermediate values of the percentages and the base of the percentage shown in appendix table 19. Or standard errors, $\sigma(x,p)$, can be calculated using formula (2). Direct computation will give more accurate results than linear interpolation.

$$\sigma_{(x,p)} = c\sqrt{\frac{b}{x}\ p\ (100 - p)}\ , \qquad (2)$$

where x is the actual size (not rounded to thousands) of the subclass of the population which is the base of the percentage; p is the percentage ($0 \leq p \leq 100$); b is 3,796; and c is 1.0 for total, white, or black and other persons and 1.4 for persons of Hispanic origin. Formula (2) is used to calculate standard errors for estimated percentages of hired farmworkers only.

Standard Errors of Estimated Averages

Averages are subject to large sampling variability since the sample estimates of an average are affected by extreme values. Appendix table 20 shows standard errors of average numbers of days of hired farmwork; appendix table 21 shows standard errors of average annual earnings; and appendix table 22 shows standard errors of average daily earnings. Linear interpolation may be used to obtain standard errors for intermediate values not shown.

In the source and reliability statement for tables 20 and 21 in The Hired Farm Working Force of 1979, standard errors were provided based on a new variance estimation procedure. However,

Appendix table 20--Standard errors of average number of days of hired farmwork 1/

(68 chances out of 100)

Average number of days of hired farmwork per year per worker	Base of average, in thousands, of hired farmworkers								
	50	100	200	250	500	750	1,000	2,500	3,000
	Number								
10	1.2	1.0	0.8	0.7	0.5	0.4	0.4	0.3	0.2
25	3.5	3.1	2.5	2.2	1.5	1.4	1.3	.9	.7
50	10.2	7.2	6.4	5.7	4.0	3.6	3.4	2.3	2.0
75	16.4	11.6	9.2	8.2	5.7	4.7	4.5	2.8	2.5
100	19.2	13.6	10.7	9.6	6.8	5.6	5.0	3.3	2.9
125	20.0	14.2	10.8	9.7	7.2	5.9	4.8	3.0	2.8
150	19.7	14.0	10.6	9.5	6.8	5.6	3.6	2.4	2.1
200	15.5	11.0	7.8	7.0	5.0	4.1	3.0	2.0	1.7
250	11.3	8.0	5.6	5.0	3.5	2.9	1.3	.9	.7
300	7.1	5.0	3.4	3.0	2.0	1.6	.8	.5	.4

Note: Appendix table 20 pertains to averages computed from distributions allowed to vary over the entire range of days worked. Standard errors for truncated distributions (for example, workers with fewer than 25 days of hired farmwork) are somewhat smaller.

1/ To obtain approximate standard errors for persons of Hispanic origin, multiply the above standard errors by 1.4.

Appendix table 21--Standard errors of average annual earnings from hired farmwork 1/

(68 chances out of 100)

Average earnings from hired farmwork per year per worker (Dollars)	Base of average, in thousands, of hired farmworkers								
	50	100	200	250	500	750	1,000	2,500	3,000
	Dollars								
100	17	12	9	8	6	5	4	3	2
250	58	41	29	26	19	18	16	11	10
500	118	84	59	53	41	40	35	23	21
750	178	126	89	80	64	62	54	36	33
1,000	219	155	110	98	85	79	68	45	41
2,000	314	223	158	141	132	110	96	64	58
3,000	331	235	167	149	138	114	99	66	60
4,000	340	241	171	153	141	115	100	67	61
5,000	344	244	173	155	142	115	100	67	61
6,000	346	245	174	156	142	115	100	67	61
9,000	345	245	174	156	142	115	100	67	61

1/ To obtain approximate standard errors for persons of Hispanic origin, multiply the above standard errors by 1.4.

Appendix table 22--Standard errors of average daily earnings from hired farmwork 1/

(68 chances out of 100)

Average earnings from hired farmwork per year per worker (Dollars)	Base of average, in thousands, of hired farmworkers							
	50	100	250	500	750	1,000	2,500	3,000
	Dollars							
5.00	0.60	0.42	0.27	0.19	0.17	0.14	0.09	0.08
7.00	1.13	.81	.51	.36	.31	.26	.16	.15
9.00	1.46	1.04	.66	.50	.42	.35	.22	.20
11.00	1.52	1.08	.68	.53	.48	.43	.27	.25
13.00	1.54	1.09	.69	.55	.51	.47	.30	.27
15.00	1.57	1.11	.71	.56	.53	.50	.32	.29
17.00	1.59	1.13	.73	.57	.55	.52	.33	.30
19.00	1.62	1.15	.75	.58	.56	.53	.34	.31
21.00	1.64	1.16	.76	.59	.57	.54	.34	.31
25.00	1.66	1.18	.78	.61	.59	.55	.35	.32
27.00	1.68	1.19	.80	.62	.60	.56	.35	.32
30.00	1.69	1.20	.81	.63	.61	.57	.36	.33

1/ To obtain approximate standard errors for persons of Hispanic origin, multiply the above standard errors by 1.4.

re-analysis of the 1979 standard errors via the variance a and b parameters showed that the individual curves were based on only a few items; thus, the reliability of these variances is questionable. Therefore, it is recommended that the parameters and tables in the 1981 report be used to calculate standard errors for 1979 data.

Illustration of Use of Standard Error Tables

Appendix table 1 of this report shows 2,492,000 persons performing hired farmwork in 1981. Interpolation of data in appendix table 18 shows the standard error for an estimate of this size to be approximately 109,000. Thus, the chances are 68 out of 100 that the estimate would have been a figure differing from a complete census figure by less than 109,000. The chances are 95 out of 100 that the estimate would have differed from a complete census figure by less than 218,000 (twice the standard error).

Appendix table 1 also shows 39 percent of the farmworkers worked fewer than 25 days. Interpolation in appendix table 19 indicates the standard error for 39 percent of a base of 2,492,000 would be approximately 1.9 percent. Consequently, chances are 68 out of 100 that the estimated 39 percent would have differed from a complete census figure by less than 1.9 percent; the chances are 95 out of 100 that the estimate would

have differed from a complete census figure by less than 3.8 percent. For example, the 95-percent confidence interval would be from 35.2 to 42.8 percent.

Standard Error of a Difference

For a difference between two sample estimates, the standard error is approximately equal to the square root of the sum of the squared standard errors of the estimates. The estimate can be of numbers, percentages, and averages. This method will represent the actual standard error quite accurately for the difference between two estimates of the same characteristic in two different areas, or for the difference between separate and uncorrelated characteristics in the same area. If, however, there is a high positive correlation between the two characteristics, the formula will overestimate the true standard error.

Illustration of the Computation of the Standard Error of a Difference

Appendix table 1 shows that 16 percent of farmworkers worked 250 days and over. The apparent differences between the workers who worked fewer than 25 days (39 percent) and those who worked 250 days and over is 23 percentage points.

Appendix table 19 shows, by interpolation, the standard error for 16 percent on a base of 2,492,000 to be approximately 1.4 percent (σ_x). The standard error for 39 percent is 1.9 percent (σ_y). To get the standard error of the estimated difference, formula (3) for the standard error of a difference is used as follows:

$$\sigma_{(x-y)} = \sqrt{\sigma_x^2 + \sigma_y^2} \quad . \qquad (3)$$

Therefore, the standard error of the estimated difference is

$$2.36 = \sqrt{(1.4)^2 + (1.9)^2} \quad .$$

This means the chances are 68 out of 100 that the estimated difference based on the sample would vary by 2.36 percentage points from the difference derived using complete census figures. Since the standard error of the estimated difference (2.36 percentage points) is less than the difference between the two estimates (23 percentage points), it can be concluded with 68 percent confidence that the percentage of hired farmworkers who worked fewer than 25 days in 1981 is greater than the percentage of workers who worked 250 days and over in 1981.

APPENDIX III: DEFINITIONS AND EXPLANATIONS

Hired Farmworkers: Persons 14 years old and over in the civilian noninstitutional population of the United States at the time of the survey who did any farmwork for cash wages or salary at any time in the year, even if only for one day.

Farmwork for Cash Wages or Salary: 1) work done on any farm for cash wages or salary in connection with the production, harvesting, threshing, preparation for market, or delivery to market of agricultural products; 2) work done off the farm for

a farmer by farmworkers, such as trips to buy feed, seeds, or fertilizer, or to handle other matters involved in running the farm business; 3) repairs of farm buildings and machinery, for example, performed by a hired farmworker when done along with the type of work specified in (1) and (2) above; and 4) managing a farm enterprise for cash salary.

Not included as farmwork for cash wages or salary are: 1) work performed by farm operators on their own farms, or "exchange" work between farmers; 2) work done exclusively for "pay in kind;" 3) work done without pay on a family farm by a member of the farm operator's family (a small regular cash allowance is not considered as farm wages); 4) nonfarmwork performed on a farm, such as the building of a farm structure, drilling a well, hauling agricultural products to market by commercial truckers, or domestic service in the home of a farmer; and 5) custom work such as spraying, threshing, and combining when a person is paid a combined rate for the use of equipment and labor.

Work Classification: Casual workers--persons who worked fewer than 25 days at farmwork. Seasonal workers--persons who worked 25-149 days. Regular workers--persons who worked 150-249 days. Year-round workers--persons who worked 250 days or more.

Days of Hired Farmwork or Nonfarmwork: Days on which any hired farmwork or nonfarmwork was reported. The work may have been for all or only part of a day.

Earnings from Farmwork and Nonfarmwork: Total cash wages or salary received for farmwork or for nonfarmwork. Estimates of earnings do not include the value of perquisites received in connection with farmwork nor the value of fringe benefits received in connection with nonfarmwork.

Primary Employment Status (termed "chief activity" in reports prior to 1976): Information on the primary employment status of hired farmworkers during the year was derived from the question, "What was _____ doing most of 1981--working, keeping house, going to school, or something else?" If the initial response was "working," the kind of work the person was doing most of the year was determined. "Hired farmwork" was recorded if most of a person's work was farmwork for cash wages or salary. "Other farmwork" was recorded if most of a person's working time was spent operating a farm (as a tenant, owner, or sharecropper) or as an unpaid family farmworker. "Nonfarmwork" was recorded if most of a person's working time was spent operating a nonfarm business, in a profession, working without pay in a family nonfarm business, or working for pay (or pay in kind) in any nonfarm activity (such as manufacturing, trade, construction, and domestic services). For the person who did not report "working" as the primary activity, information was obtained on what he or she was doing most of the year. "Looking for work" (unemployed) was reported for a person who spent most of the time without employment but was actively looking for a job. "Keeping house" was reported for a person

who spent most of the time doing his or her own housework. "Going to school" was reported for a person who spent most of the time during the year going to school. The category "other" was reported for a person who spent most of the time at some activity other than those named above.

Major Crop or Livestock Activity: Information on crop or livestock activity was derived from the question, "What crops or livestock did _____ work with most on the farm where he or she worked the greatest number of days in 1981?" Categories of response included grains, tobacco, cotton, other field crops, vegetables and melons, fruit or tree nuts, beef cattle, dairy, other livestock, nursery or tree crops, and other.

Migratory Status: Migratory workers are those who 1) left their home temporarily overnight to do hired farmwork in a different county within the same State or in a different State with the expectation of eventually returning home, or 2) had no usual place of residence, and did hired farmwork in two or more counties during the year. Nonmigratory workers are those who 1) did all their hired farmwork for the year in the same county in which they lived, 2) made a permanent move from one county to another during the year (even if they did hired farmwork in both counties), or 3) commuted daily across the county or State line to work and returned home each night.

Distance Traveled: Determined by asking the respondent, "What was the longest distance away from home that _____ traveled while doing farmwork for cash wages?" Interviewers were instructed to record the mileage traveled by the workers from the time they left their homesite until the time they reached the place that was the longest distance away from their home. Distance traveled does not include miles to return to homesite.

Age: Based on the person's age at his or her last birthday.

Education Completed: Derived from the combination of answers to questions concerning the highest grade of school attended by the person and whether or not the grade was finished. Questions on educational attainment apply only to progress in graded public, private, and parochial elementary and high schools, whether day schools or night schools. Thus, schooling is that which may advance a person toward an elementary school certificate; a high school diploma; or a college, university, or professional school degree. Schooling in other schools was counted only if the credits obtained were regarded as transferable to a school in the regular school system.

Racial/Ethnic Group: Refers to division of the population into three mutually exclusive groups--whites, Hispanics, and blacks and others. "Ethnic origin" was determined for this report by asking respondents their origin or descent. The answer to this question may produce results somewhat different from results based on inferred ethnic identification using such characteristics as country of birth of the person or his or her parents, language spoken in the home, or surname. "Hispanic"

includes all Mexican, Mexicano, Puerto Rican, Cuban, Central or South American, or other Hispanic persons? "White" refers to white persons other than those of Hispanic origin. "Black and other" includes blacks and other groups such as Indians, Chinese, Japanese, and others not of Hispanic origin. For simplicity of presentation, these groups are termed whites, Hispanics, and blacks and others.

Family Income: As defined in this study, represents the combined total money income of the family head plus the income of all the head's relatives 14 years of age and over who were family members at the time of the survey. Family income includes wages and salaries, net income from business or farm, pensions, dividends, interest, rent, social security payments, and any other money income received by members of the family during the 12-month period prior to the interview.

Region: Hired farmworker data are presented in the report by two different regional aggregations of States, the four census regions and the 10 Standard Federal Regions.

States included in each of the four census regions are as follows: Northeast--Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, and New Jersey; North Central--Ohio, Indiana, Illinois, Wisconsin, Michigan, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas; South--Maryland, Delaware, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas; and West--Montana, Wyoming, Idaho, Colorado, New Mexico, Utah, Arizona, Nevada, Washington, Oregon, California, Hawaii, and Alaska.

The States included in each of the 10 Standard Federal Regions are as follows: Region I--Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; Region II--New Jersey and New York; Region III--Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia; Region IV--Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee; Region V--Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; Region VI--Arkansas, Louisiana, New Mexico, Oklahoma, and Texas; Region VII--Iowa, Kansas, Missouri, and Nebraska; Region VIII--Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming; Region IX--Arizona, California, Hawaii, and Nevada; Region X--Alaska, Idaho, Oregon, and Washington.

Residence: Based on the classification of the place in which the worker lived at the time of the survey. Farm--hired farmworkers were classified as living on farms (farm residents) if they lived on places from which at least $1,000 worth of agricultural products were sold or normally would have been sold in the reporting year. Prior to 1981, the old farm definition was used, with farm residents classified as those living on a place of 10 or more acres of land from which at least $50 worth of agricultural products were sold, or less than 10 acres if as

much as $250 worth of agricultural products were sold from the place in the reported year. Nonfarm--workers who lived in urban places, rural towns or villages, or in the open country on places that did not meet the criteria for farm classification.

Northern Great Plains Coal Mining

What are the likely effects of expanded coal mining in Montana, Wyoming, and North Dakota on the small towns and communities there? Mining activity in the sparsely populated region has grown dramatically over the last decade—from less than 20 million tons of coal in 1970, to 100 million tons in 1978, with projections for 350 million tons per year by the mid-1980's.

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To try to ascertain the effects of development on the region, the authors of this report used computerized simulations of various levels of coal activity to see if the communities could afford the increased level of government services and upgraded infrastructure required by new energy projects and the larger population attracted by those projects.

In the long run (10 years or more), most communities in the region will be able to pay for the services required by the new coal-related development, provided that they can tax the new developments. Without taxing authority (for instance, if the mine lies outside the taxing district of a locality), they will have problems.

Northern Great Plains Coal Mining: Regional Impacts (by Thomas F. Stinson, Lloyd D. Bender, and Stanley W. Voelker; AIB-452; July 1982; 36 pages; color illustrations; $5; stock no. 001-000-04265-3).

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Mineral Tax Laws Reviewed

State taxes on mineral production yielded more than $4 billion in revenues for 17 major mineral-producing States in 1980 and accounted for more than 20 percent of total tax revenues in 7 States. Yet, raising State revenues seems to be only a minor reason for many States in taxing mineral resources. In addition, taxing minerals presents problems unlike those involved in other kinds of taxes (how and when to assess the value of the minerals, for example).

State Mineral Taxes, 1982, summarizes the mineral tax laws in 31 States and includes special uses for which the tax revenues are earmarked.

The report tells you:

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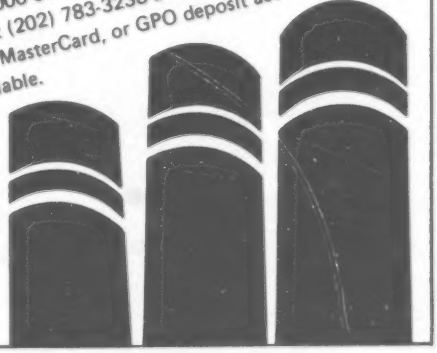
- The most common kinds of severance taxes levied on minerals, how they differ from one another, and how they compare with one another on factors like ease of administration, equity, and so forth.

For your copy of *State Mineral Taxes, 1982* (Thomas F. Stinson and George S. Temple; 72 pages; $4.50), write to Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Make your check or money order payable to Superintendent of Documents; ask for stock number 001-000-04317-0. For faster service, call GPO's order desk at (202) 783-3238 and charge your purchase to your VISA, MasterCard, or GPO deposit account. Bulk discounts available.



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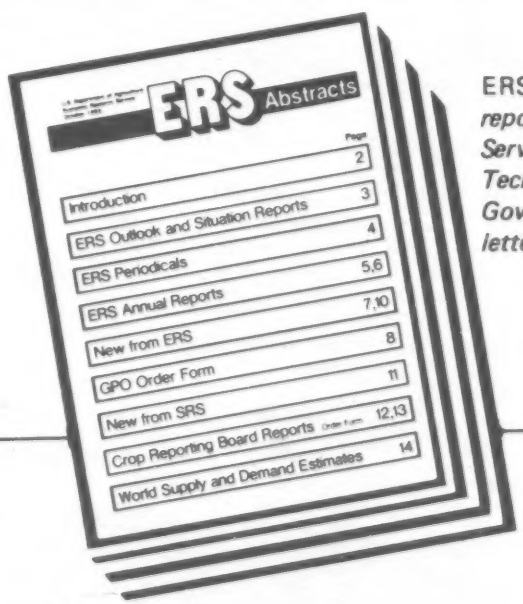

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